

https://dspace.org/

Perceptions of justice: demographic variables and social position

Katz, Lesley-Anne

2009-05-29T10:15:19Z
http://hdl.handle.net/10539/7001

Downloaded from a DSpace repository. https://dspace.org/

Perceptions Of Justice: Demographic Variables And Social Position

By Lesley-Anne Katz

Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy, to the

Faculty of Humanities, University of the Witwatersrand, Johannesburg

Johannesburg, 2005

DECLARATION

I hereby declare that this thesis is my own unaided work and has not been submitted to any other University for the purpose of any other degree.

Lesley-Anne Katz

Date

Dedication

I would like to dedicate this thesis to three men – my beloved son Aaron John, the man for whom he was named, my father John Mendel Katz, and my husband Michael. As the past becomes a different kind of present I realise how blessed I have been by all of you and how you are attendant in everything that I do.

Acknowledgements

I would like to thank the following people without whose assistance this thesis would not have been possible:

My supervisor, Professor James Fisher, who has overseen my progress from an honours student into an academic, and who has influenced me in every facet of that journey.

All the employees who assisted me by participating in this study, for their time and input.

The organisation and their unions who granted me access to their employees and helped arrange all the logistics.

My social justice reading group, especially Shireen Hassim, Penny Enslin and Shirley Pendlebury, for their input and intellectual generosity, without which I would have lost faith.

Mike Greyling, for his excellent advice and assistance, and for his unwavering friendship.

My colleagues in the School of Human and Community Development, for their support and assistance.

My family, for their investment in my career and accomplishments, which made it easier to go on when I really didn't feel like it.

Connie Valkin – the best story teller ever, for giving me the power to change everything and make a world in which I can have anything.

Lena, who came into our lives at just the right time and has made everything just so much easier.

And in particular, my darling husband Michael whose support has been constant and example inspiring, for helping me to create the kind of life in which all of this is possible, and for guiding me into the kind of academia to which I could commit a lifetime. I hold you in the highest esteem.

Abstract

The current study aimed to explore peoples' experiences of social and organisational justice, and in doing so asked three central questions. The first focused on whether there was a relationship between the different dimensions of justice, and the second on the commonalties and differences in peoples' perceptions of justice. The third question looked at whether demographic variables, as markers of social identity, were predictive of such justice perceptions. The study was quantitative in nature, and made use of a non-experimental, partially exploratory, cross-sectional design. Four hundred and eight six employees of a large South African manufacturing organisation completed a self report questionnaire containing questions about a range of biographic, domestic, financial, employment, and religious information, as well as two measures of social and organisational justice perceptions. Once preliminary analyses were carried out to ensure the psychometric properties of the measuring instruments and explore the data set, two key statistical procedures were used to answer the research questions, namely a cluster analysis and a Chi Squared Automatic Interaction Detection or CHAID analysis. Results of these analyses provided some evidence to argue that justice perceptions in different contexts, while not strongly related, cannot be seen in isolation from another, and that a more integrative or reciprocal approach to understanding different justice perceptions needs to be adopted. Further, the results of the cluster analysis demonstrated that a range of key justice concerns differentiated groups from another, including collective versus individual concerns, personal versus impersonal events, as well as concerns related to the different types of relationships that exist. Finally, the CHAID analysis provided some indication of which demographic variables were the best determinants of social and organisational justice perceptions, and the ways in which demographic variables interacted with one another in relation to peoples' experiences of justice.

Part 1: Theoretical and Conceptual Background

Part 2: Present Research

Abstract

The current study aimed to explore peoples' experiences of social and organisational justice, and in doing so asked three central questions. The first focused on whether there was a relationship between the different dimensions of justice, and the second on the commonalties and differences in peoples' perceptions of justice. The third question looked at whether demographic variables, as markers of social identity, were predictive of such justice perceptions. The study was quantitative in nature, and made use of a non-experimental, partially exploratory, cross-sectional design. Four hundred and eight six employees of a large South African manufacturing organisation completed a self report questionnaire containing questions about a range of biographic, domestic, financial, employment, and religious information, as well as two measures of social and organisational justice perceptions. Once preliminary analyses were carried out to ensure the psychometric properties of the measuring instruments and explore the data set, two key statistical procedures were used to answer the research questions, namely a cluster analysis and a Chi Squared Automatic Interaction Detection or CHAID analysis. Results of these analyses provided some evidence to argue that justice perceptions in different contexts, while not strongly related, cannot be seen in isolation from another, and that a more integrative or reciprocal approach to understanding different justice perceptions needs to be adopted. Further, the results of the cluster analysis demonstrated that a range of key justice concerns differentiated groups from another, including collective versus individual concerns, personal versus impersonal events, as well as concerns related to the different types of relationships that exist. Finally, the CHAID analysis provided some indication of which demographic variables were the best determinants of social and organisational justice perceptions, and the ways in which demographic variables interacted with one another in relation to peoples' experiences of justice.

Table of Contents

Part 1: Theoretical and Conceptual Background

Chapter 2: Social Justice .....

Overview .....

Distributive Justice .....

Procedural Justice .....

Interpersonal Justice .....

Conclusion .....

Chapter 3: Organisational Justice .....

Overview .....

Organisational Justice: Applying Justice Theory to the Workplace. .....

Conclusion .....

Chapter 4: Individual Characteristics and Perceptions of Justice .....

Overview .....

Justice and the Individual .....

Justice Perceptions and Demographic Variables .....

Conclusion. .....

Part 2: Current Study

Chapter 5: Rationale and Procedure .....

Overview .....

Rationale for the Current Study .....

Methodological Approach of the Study .....

Defining and Measuring the Research Variables .....

Statistical Analysis .....

Conclusion .....

Chapter 6: Results.....

Overview.....

Scale Validation.....

Description of the Data Set.....

Relationships between the Dependent Variables.....

Cluster Analysis.....

CHAID Analysis.....

Conclusion .....

List of Tables

Table 5.1. Demographic Frequencies of Sample – Personal Characteristics .....

Table 5.2. Demographic Frequencies of Sample – Employment Characteristics .....

Table 5.3. Sample Descriptors – Age and Tenure .....

Table 5.4. Demographic frequencies for Total Sample (Pilot Study) .....

Table 5.5. Age for Total Sample (Pilot Study) .....

Table: 5.6. Demographic Frequencies for Sample: Form 1 and Form 2 (Pilot Study) .....

Table 5.7. Age for Sample Form 1 and Form 2 (Pilot Study) .....

Table 5.8. Descriptives for Form 1 and Form 2 (Pilot Study)

Table 5.9. Cronbach Alphas for Form 1 and Form 2 (Pilot Study) .....

Table 5.10.Item-total Statistics for Form 1 (Pilot Study) .....

Table 5.11.Item-total Statistics for Form 2 (Pilot Study) .....

Table 5.12. Factor Extraction with Kaiser's Criterion for Form 1 (Pilot study)

Table 5.13. Scree Plot Form 1 .....

Table 5.14. Component Matrix Unrotated Form 1 .....

Table 5.15. Component Matrix Varimax Rotation Form 1 .....

Table 5.16. Factor Extraction with Kaiser's Criterion for Form 2 (Pilot study) .....

Table 5.17. Scree Plot for Form 2 .....

Table 5.18. Component Matrix Unrotated Form 2 .....

Table 5.19: Component Matrix Varimax Rotation Form 2 .....

Table 5.20: T-Test Form 1 and 2 .....

Table 6.1. Cronbach Alpha for Global Organisational Justice Perceptions Scale

Table 6.2. Item-Total Statistics for Global Organisational Justice Perceptions Scale .....

Table 6.3: Factor Extraction with Kaiser's Criterion for Global Organisational Justice Perceptions Scale .....

Table 6.4 Scree Plot for Global Organisational Justice Perceptions Scale .....

Table 6.5: Component Matrix for Global Organisational Justice Perceptions Scale – Varimax Rotation

Table 6.6: Component Matrix for Global Organisational Justice Perceptions Scale – One Factor Analysis.....

Table 6.7: Cronbach Alpha for Belief in a Just World Scale .**Error! Bookmark not defined.**

Table 6.8: Item-Total Statistics for Belief in a Just World Scale.....**Error! Bookmark not defined.**

Table 6.9: Factor Extraction with Kaiser's Criterion for Belief in a Just World Scale.. **Error! Bookmark not defined.**

Table 6.10: Scree Plot for Belief in a Just World Scale .....**Error! Bookmark not defined.**

Table 6.11: Component Matrix for Belief in a just World Scale – Two-Factor Analysis (Unrotated) .....**Error! Bookmark not defined.**

Table 6.12: Component Matrix for Belief in a Just World Scale – Two-Factor Analysis (Varimax Rotation) .....**Error! Bookmark not defined.**

Table 6.13: Cronbach Alpha for Belief in an Unjust World Scale.....**Error! Bookmark not defined.**

Table 6.14: Item-Total Statistics for Belief in an Unjust World Scale..**Error! Bookmark not defined.**

Table 6.15: Cronbach Alpha for New Belief in a Just World Scale.....**Error! Bookmark not defined.**

Table 6.16: Item-Total Statistics for New Belief in a Just World Scale**Error! Bookmark not defined.**

Table 6.17: Spearman's Correlation Co-efficients for the New Belief in a Just World Scale and the Belief in an Unjust World Scale ..... **Error! Bookmark not defined.**

Table 6.18: Summary Statistics for All Scales ..... **Error! Bookmark not defined.**

Table 6.19: Distribution Analysis for Global Organisational Justice Perceptions Scale – Goodness of Fit Tests for Normal Distribution ..... **Error! Bookmark not defined.**

Table 6.20: Distribution Analysis for New Belief in an Unjust World – Goodness of Fit Tests for Normal Distribution..... **Error! Bookmark not defined.**

Table 6.21: Distribution Analysis for New Belief in a Just World – Goodness of Fit Tests for Normal Distribution ..... **Error! Bookmark not defined.**

Table 6.22: Spearman Correlation Co-Efficients for All Scales ..... **Error! Bookmark not defined.**

Table 6.23: Cluster History (Organisational Justice Perceptions)..... **Error! Bookmark not defined.**

Table 6.24: Cluster Composition- Organisational Justice Perceptions . **Error! Bookmark not defined.**

Table 6:25: Cluster History (Belief in a Just World)..... **Error! Bookmark not defined.**

Table 6.26: Cluster Composition – Belief in a Just World (3-Cluster Solution)..... **Error! Bookmark not defined.**

Table 6:27: Cluster Composition – Belief in a Just World (6-Cluster Solution) ..... **Error! Bookmark not defined.**

Table 6:28: Cluster History (Belief in an Unjust World) ..... **Error! Bookmark not defined.**

Table 6.29: Cluster Composition – Belief in an Unjust World (3-Cluster Solution) ..... **Error! Bookmark not defined.**

Table 6.30: Cluster Composition- Belief in an Unjust World (6-Factor Solution) ..... **Error! Bookmark not defined.**

List of Figures

Figure 6.1: Distribution Analysis for Global Organisational Justice Perceptions Scale – Histogram with Fitted Normal Distribution **Error! Bookı**

Figure 6.2: Distribution Analysis for New Belief in an Unjust World – Histogram with Fitted Normal Distribution **Error! Bookı**

Figure 6.3: Distribution Analysis for New Belief in a Just World – Histogram with Fitted Normal Distribution **Error! Bookı**

Figure 6.4: Dendrogram for Organisational Justice Perceptions **Error! Bookı**

Figure 6.5: Organisational Justice Items Mean Score Cluster Profile **Error! Bookı**

Figure 6.6: Dendrogram - Belief in a Just World **Error! Bookı**

Figure 6.7: Belief in a Just World Mean Score Cluster Profile (3-Cluster Solution) **Error! Bookı**

Figure 6.8: Belief in a Just World Mean Score Cluster Profile (6-Cluster Solution) **Error! Bookı**

Figure 6.9: Dendrogram - Belief in an Unjust World **Error! Bookı**

Figure 6.10: Belief in an Unjust World Mean Score Cluster Profile (3-Cluster Solution) **Error! Bookı**

Figure 6.11: Belief in an Unjust World Mean Score Cluster Profile (6-Cluster Solution) **Error! Bookı**

Figure 6.12: CHAID Tree: Organisational Justice Perceptions **Error! Bookı**

Figure 6.13: Competing Splits Tree - Organisational Justice Perceptions **Error! Bookı**

Figure 6.14: CHAID Tree - Belief in a Just World **Error! Bookı**

Figure 6.15: Competing Splits Tree - Belief in a Just World **Error! Bookı**

Figure 6.16: CHAID Tree - Belief in an Unjust World **Error! Bookı**

Figure 6.17: Competing Splits Tree - Belief in an Unjust World **Error! Bookı**

Dear Prof. Fisher

Re: Report on Changes to PhD

As per our discussion, the following changes were made to my PhD.

With regards to Dr Moore's report, the term social identity was replaced with social position or with the word demography. In addition, paragraphs were included explaining the distinction between demographics and social identity, and the notion of social position (where demographics mean more than just descriptors but are not synonymous with social identity) was explained. It was also emphasised that social identity was not synonymous with demographic variables.

Approximately five pages were included in the introduction giving a brief historical and contextual account of South Africa. Further, some of the more relevant current contextual concerns were elucidated, and these were linked to questions about justice.

Repetitive paragraphs were removed in a number of places. In addition it was explained to the reader in two places (in the introductory chapter and at the beginning of part two of the thesis) that summaries and repetitions of arguments are a stylistic choice aimed at facilitating easier engagement by the reader.

Jasso was included in chapter two when discussing equity theory.

With regards to Prof. Terreblanche and Prof Skitka, the following changes were made.

Arguments with regards to an alternative model for the tripartite model were made more concrete and were elaborate don. Ways in which the cluster analysis results could be used to think about an alternative model for understanding the structure of justice were discussed. The fact that these findings were only a point of departure for such discussions was also emphasised. This was done in the discussion chapter.

A section on belief in a just world theory was included in chapter two after the discussion about equity theory. An overview of the theory as well as some of the key debates and

controversies surrounding the concept were presented. The idea that belief in a just world is a personality trait was discussed and criticised. Some of the ways in which this construct has been researched was included.

Further to this, in the methodology section, the choice of scale (i.e. using the belief in a just world scale to measure social justice perceptions) was further elaborated and argued.

Also in the methodology chapter the fact that using item level analyses such as the cluster analysis mitigated against needing psychometric scales was clarified repeatedly. It was explained that each item was analysed, and that additive totals for the scale as a whole were not used.

Finally the limitations section was expanded to include some of the concerns expressed by the examiners.

Thanking you

Lesley-Anne Katz

Chapter 1: Introduction

The current study has perceptions of justice as its central focus. Justice can be seen to be an emergent characteristic of social aggregation. Such aggregation occurs as people identify important common elements in one another, and recognise the need for coexistence. This coexistence allows for the creation of individual and group resources. These resources include not only material goods, but also conditions such as status and social opportunity. The basis upon which these resources are distributed to the members of the group is complex and becomes contested, particularly given the increasing intricacy of social aggregation. The differential allotment of goods and conditions to individuals or groups is central to the concept of justice, and issues about the ownership of things such as skills, money, education, and material goods, the rights of individuals versus groups, as well as notions of what constitutes group membership emerge as important related concerns. Justice is considered by many to be the prime social value of sound social institutions. It is generally held to be second only to economic prosperity as the principal value of social and political organisation. (Campbell, 1998).

Given this primacy, as well as the fact that justice concerns clearly underpin so many aspects of our social functioning, it is not surprising that it has received academic attention from so many disciplines. Exploration into the definition and nature of justice has its roots in the philosophical study of ethics (Singer, 1994). Ethics, one of the main branches of philosophy, is the study of morality, which refers to the informal public system that governs behaviour that affects others (Audi, 2001). Questions central to this field of enquiry are what ends fully rational beings such as ourselves ought to choose and pursue, as well as what moral principles should govern our choices and pursuits (Audi, 2001). Psychology, on the other hand, in

exploring the individual's subjective experience of justice, has focussed on questions such as why will one person judge a given outcome to be fair while another might not, what criteria do people use to make justice judgements, in what ways do justice judgements effect our attitudes and behaviour, and what role do justice perceptions play in perceptions about decisions and decision makers? In addition, the impact that context has on concerns such as these, has taken psychological research into justice perceptions into, among others, school, work, home, hospital, and legal settings.

Clearly there are different levels at which issues of justice manifest themselves, and which form the focus of different disciplines. At its broadest, questions of justice pertain to the major institutions of society, and incorporate concerns about the construction and role of the state, fundamental rights of human beings, and the function of key institutions, and the ways in which these inform and are informed by principles of justice (For examples see Rawls, 1971, Nozick, 1974, Young, 1990, Sen, 1997). At an interpersonal level questions about justice emerge in relation to the relationships between people and groups, the ways in which justice defines relationships, the effects of injustice on relationships, as well as in matters such as discrimination and redress (Cropanzano & Greenberg, 1997, Cropanzano, 2001). At an intrapersonal level, justice has been looked at in relation to the moral development of people, as well as the role that personality and other individual differences play in justice perceptions (e.g. Kohlberg, 1963, Piaget, 1932/1965 , Lerner, 1980). Different disciplines tend to focus on particular levels, often dictated by a larger disciplinary orientation or view of the discipline's scope.

The discipline of psychology, because of the way in which it defines itself and its research practices as being most primarily about individual functioning and well-being, has been active

most predominantly in the inter and intra personal dimensions of justice research. At an individual level our focus is on the way individuals acquire a sense of justice, how cognitive processes work in relation to making justice judgements, and what the reactions to perceived injustice are. At a group/organisational level the focus is on the distribution of resources within the context of a need for cooperation and competition, as well as the influence of group relations on the development of justice principles and the interplay between group and individual reactions to perceived injustice. At a broader societal level, the focus is on people's perceptions of the distribution of rewards, income and social security. (Vermunt, & Steensma, 1991).

Another dimension along which different disciplines diverge in their study of justice is that of context. Questions of justice emerge in almost every context that can be thought of: educational facilities, the home, the workplace, religious institutions, courts of law, government departments, and many others. These contexts often have overriding concerns about justice in common, but they also raise questions that are particularly pertinent and at times unique to the context. Concerns about paternalism and the role of woman, for example, are relevant in many different contexts, such as the family, the workplace, or religious institutions. Questions about performance appraisals, however, may be particularly pertinent to the workplace. Psychologists have been active in researching justice in a number of contexts, including legal settings such as courts, schools and universities, as well as, quite predominantly, the workplace. As will be discussed in Chapter 3, psychology's study of justice in the workplace has developed into a domain of research and application that accounts for a large proportion of work being done on interpersonal aspects of justice in the discipline of psychology. Workplace justice concerns itself with the ways in which employees determine whether they have been fairly treated in their jobs, and the way in which perceptions of justice

impact on other work related variables (Moorman, 1991). While organisational justice researchers acknowledge their roots in social psychology, they assert that this area has developed an identity that is now independent of these origins (Cropanzano, 2001). The psychological study of justice in the workplace has become known more commonly as organisational justice research. While this can be misleading, as the term organisation can refer to any number of agglomerations of people other than the workplace (and this research does focus almost exclusively on the workplace), this is the term that is used in the current study in order to remain consistent with the vast amount of research and literature available.

As can be seen, psychological approaches to the development of justice theory have been influenced by the level as well as the context of the enquiry. It is these two concerns that have laid the foundation for the current research. The broad aim of the current study is to explore the ways in which demographic variables, as markers of social position, determine peoples' experiences of both social and organisational justice. As such it focuses on individual characteristics that determine or influence experiences of justice at an interpersonal level. Further, some aspects of the study are located in the specific field of organisational psychology, while others pertain to larger social institutions and practices. As such the study is looking at different aspects of justice that operate within different contexts. This begins to raise questions regarding the similarity or disparity between the different aspects of justice under investigation- Are these the same constructs, different aspects of the same construct, or at times are they something completely different? More specifically stated, can we expect perceptions of organisational justice to function in the same way as perceptions of social justice? The investigation of such considerations form secondary aims of the current study.

The broader context in which these questions are being explored, that is in South Africa, brings particular meaning to bear on the research. This is because given our unique history, questions about justice are at the forefront of our society's collective mind, and underpin much of our current discourse. The reasons for this become clearer when looking at the history of Apartheid and the challenges it has left for current and future generations.

When Union was declared in South Africa in 1910, the country was deeply marked by its colonial past. The onset of modernisation had resulted in burgeoning urban centres to which the erstwhile pastoral and subsistence farming black community flocked, taking up positions in the emerging mining and industrial sectors. Governed increasingly by the logic of segregation, a range of legislative acts were passed to preclude the full and meaningful participation of black South Africans in the industrialising economy, as well as clearing the land for the modernisation of the (white controlled) agricultural sector. The Lands Act of 1913, for instance, limited back ownership of land to 13% of the country, resulting in excessive farming and the gradual environmental degradation of these areas.

Alongside the black majority of subjects, were impoverished Afrikaans citizens who had similarly engaged urbanisation in the face of their increasing proletarianisation. This ostensibly marginal group, whose fate had seemingly been sealed by the outcome of the Anglo-Boer War, began a systematic process of political and ideological consolidation. By the early 1940s, this group had begun to challenge the English colonial hegemony with an increasingly nationalist agenda. In 1948, the National Party ousted the government of Jan Smuts to take power.

From 1948 on, segregation (which had hitherto been somewhat piecemeal and was riddled with inconsistencies) was formalised and systematised into ‘apartheid’. The ostensible principle was to establish self-governing territories called ‘homelands’ (or, more appositely, ‘bantustans’) in which black South Africans could achieve self-determination under the guidance of so-called traditional leaders. In reality, the system was an attempt to hypostasise black South African subjects in an archaic and anachronistic version of social organisation that would ensure that the could not be competitive in economic, and, therefore, in political terms. The bantustans served the emerging industrial complex as reservoirs of cheap labour in which migrancy became the dominant mode. The consequences of this were the eradication of social and cultural coherence and an increasing reliance in non-commercial economic activities on the labour of women.

Alongside the more overtly economic legislation emphasising job protection for whites and limiting the organisation of black labour, a range of more overtly ideological measures became entrenched. These sought to police subjectivity by driving a wedge between the white community and black, Indian and (so-called) Coloured community of hybrid origin. Among these The Group Areas Act designated areas in cities for the exclusive habitation of whites (which were plush and suburban as a consequence of the wealth profile of this community) and others for black South Africans (which were impoverished and designed for effective policing). White areas were separated from black townships by *cordons sanitaire*, the implication of the name being that black South Africans threatened, in some metaphorical sense, to infect white South Africa. Thus ideology is rendered in spatial terms in the South African landscape. Other cornerstones of apartheid legislation included the Population Registration Act, the Mixed Marriages Act and the Immorality Act (which forbade sexual relations across the colour line).

While the history of resistance to colonial injustices began with their emergence, it was in 1912 that the African National Congress was founded. The organisation became increasingly militant in 1960s following the Defiance Campaign during the preceding decade, which had been based on the principles of passive resistance inspired by the example of Mahatma Gandhi. Umkhonto we Sizwe, the armed wing of the ANC, was formed in 1960 under the immediate command of Nelson Mandela and Oliver Tambo. Along with the increasing militancy of resistance to apartheid came increasingly systematic oppression. All resistance organisations were banned in the early 1960s, and leaders who were unable to flee into exile were imprisoned. The 1960s are still known as a 'silenced' period, during which state mechanisms of control became steadily elaborated and consolidated.

In 1976, inspired by the philosophy of Black Consciousness and a growing sense of alienation and frustration, a student-led protest began in the streets of Soweto, a township in Johannesburg. Between 1976 and 1990 this internal resistance was increasingly accompanied by the flight of young militants into neighbouring territories from which a systematic military campaign against the apartheid state was conducted. With, among others, Russian, Cuban and Chinese assistance, the South African Defence Force (SADF) found itself increasingly on the receiving end of more advanced weaponry and more motivated troops. Although it remains rather under acknowledged, the military defeat of the SADF in the Angolan War in the late 1980s struck at the heart of the military-ideological complex of the Afrikaner nationalist state.

By the late 1980s, it emerged that the Nationalist Party was seeking some version of rapprochement, and secret talks were begun with the leadership of the ANC. In 1990 Nelson Mandela, who was increasingly taken to embody the hopes for a new South Africa, was

released from Robbin Island, where he had been imprisoned for treason for the last 27 years. The country's first democratic election was held in 1994, and the ANC swept to power. With the transformation of black South African from subjects to citizens and the institutionalisation of liberal democracy, it was generally assumed that apartheid had been conquered and a new order installed. Of course, historical transformations are never of this order. Colonial and apartheid history meant that the country remained trapped in the realities of economic inequalities and that it would be haunted by its traumatic history.

An attempt to redress the latter was formalised in the Truth and Reconciliation Commission (TRC). The TRC conducted public hearings involving the confessions of perpetrators and the opportunity for victims of apartheid to tell their stories. Intended as both cathartic and restorative, the success of the Commission was qualified. The wounds inflected by the long and brutal history of apartheid could not be that ritualistically healed, it seemed.

But the major ways in which apartheid history persists relate to economic disparity between black and white South Africans. Although the history of the struggle against apartheid has been steered by organised labour structures, most persuasively the Congress of South African Trade Unions (COSATU), black labourers continue to constitute by far the largest constituency in the unskilled and semi-skilled labour force and often work in adverse conditions. Many continue to be subjected to exploitative and unsafe working conditions. Thus, although the political and institutional apparatus of apartheid has been dismantled, its effects are still felt in the ways that probably matter the most. Further, the division of wealth that is based in colonial and apartheid history is still pronounced and persists despite the ostensible achievement of wage equity between black and white workers and various attempts at black economic empowerment.

Given this history, along with its legacy for current day South Africa, it is unsurprising that justice concerns emerge as particularly salient in almost every context in this country. From larger social institutions to individual rights and responsibilities, questions of justice, both in relation to matters of redress as well as creating a just future society, are paramount, and form part of the every day discourse of the country. It is thus important that questions about justice be addressed by social researchers, particularly as an attempt to begin building indigenous knowledge systems that can assist the challenges of transformation that face our particular society. Arguably a useful point of departure for such investigations would be to challenge the value of justice theories which have largely been imported wholesale from North America and Western European countries, and to start relooking at how questions about justice can be asked and explored in different ways. The current study is an attempt to begin shifting our understanding of justice away from more traditional models in order to explore some of the complexities that exist in our society.

The first half of this thesis provides the conceptual and theoretical underpinnings of the current study. The literature and research review presented in this first half highlight two sets of challenges – the first relates to theoretical questions that beg investigation and thus have bearing on the research questions, while the second concerns the methodological approach to be adopted, with particular reference to the definition and measurement of variables as well as the statistical analyses used. Theoretical concerns related to the relationship between different types of justice as well as the relationship between demographic variables (as indicators of social position) and perceptions of justice have informed the research questions being investigated. Further, concerns about the way in which social psychologists investigate questions about justice and demographic variables have directed the methodological approach

of the current study. This is particularly in relation to the way in which the variables under consideration are being defined and measured, as well as the types of statistical tools employed to analyse the data.

The first half of the thesis comprises chapters 2, 3, and 4. Chapter 2 starts with an exploration and critical discussion of the notion of social justice. This chapter has one primary aim, that is to chart the history of the study of social justice in order to provide a 'map of the terrain' – where does the study of justice have its roots and how has thinking in this area developed and changed over the years. This chapter aims to focus in particular on the psychological study of social justice – that is the emphasis is on psychology's attempts to understand justice as a social phenomena, rather than an individual developmental concern. In doing this a psychological framework for understanding justice will be used, one that understands perceptions of justice to comprise distributive , procedural, and interpersonal concerns. This tripartite model will be used firstly as a way to structure the historical discussion of the study of justice, but also to introduce concerns about the structure itself.

Chapter 3 focuses on organisational justice, with two key aims in mind. The first, which is similar to Chapter 2, it is to provide an overview of the research trajectory of organisational justice in order to provide a point of departure for the current study. This chapter also aims to provide a critical review of the methodological underpinnings of the research done in this area, once again in order to assist with a point of departure for the current study. Given that there is no justice theory unique to organisational justice research and that this theory is discussed in Chapter 2, this chapter largely focuses on organisational justice research, of which there is a considerable amount. This research is discussed in relation to four broad areas, that of antecedents of justice perceptions, outcomes of justice perceptions, the

relationship between individual characteristics and perceptions of justice, and finally justice perceptions as a mediator of other workplace relationships

Chapter 4 provides a discussion of the third variable under study, namely demographic variables. While Chapters 2 and 3 focus on the broad area of justice, both in terms of social justice as well as in relation to questions about justice in organisations, this chapter aims to propose a specific set of problems that are arguably in need of investigation – that is the study of individual characteristics, with particular reference to demographic variables, in relation to experiences of justice. The chapter begins with a discussion of theories that indicate the importance of individual characteristics, particularly demographic variables such as race and gender, for notions of social position. The discussion then moves more specifically into the area of justice, and the role that demographic variables and social position play in shaping perceptions and experiences of justice. The second part of this chapter then provides a critical review of research that has explored demographic variables and perceptions of justice. The chapter concludes with a discussion of the key arguments to emerge from this chapter – specifically the importance of exploring demographic variables in relation to questions about justice, as well as the importance of using methodologies that are considered and that can account for the complexity of this area.

The second half of this thesis focuses on the current study itself, and comprises chapters 5, 6, and 7. Chapter 5 is divided into four main sections. The first section provides an overview of the arguments made in the preceding chapters, and outlines the rationale for the current study. It ends with the presentation of the research questions that have emerged from these arguments. The second section provides an overview of the methodological concerns that have influenced the current study and focuses more specifically on the research design and the

nature of the sample, and provides information about procedures used, as well as biographical information on participating subjects. The third and fourth sections address two particular issues that have emerged as central methodological concerns, that is the definition and measurement of the variables under investigation, and the statistical analyses used. In the third section, information about the psychometric properties of scales being used is provided. In addition to this information is provided about the development and validation of a new organisational justice perceptions measure. Details about the pilot study, including information about the sample, procedures used, statistical analyses and results are presented. The fourth section details the statistical analyses to be conducted in light of the methodological concerns raised in the first half of the report.

Chapter 6 presents the results of the statistical analysis carried out. The analyses are conducted, and results presented, in a number of steps. First the psychometric properties of the scales are explored, and Cronbach Alphas and factor analyses are presented for each measure. Following the exploration of the measuring instruments, the data set is explored, with descriptive summary statistics being presented, followed by distribution analyses for each set of measures. Once the preliminary analyses are complete, the research questions are explored. Firstly a correlation analysis is conducted in order to explore the relationship between organisational and social justice perceptions. The next stage in the analysis is a cluster analysis, which is conducted on each of the dependent variables. Using the clusters as dependent variables, the CHAID explores the relationship between the demographic variables and justice perceptions. A separate analysis is conducted for each of the justice dimensions. Finally the chapter is concluded with a review of the main results found through the analyses conducted.

Chapter 7 presents a discussion of these findings, both in relation to the conceptual framework of this study described in chapters 2, 3, and 4, as well as in relation to the research questions framed in chapter 5. The implications that this study has for future research as well as the limitations of the study are also discussed. Finally, Chapter 8 comprises a list of references used in this thesis.

One final note with regards to a stylistic point. Given that this thesis spans 400 pages and makes several arguments towards a rationale and methodology, each chapter is concluded with a summary of the key arguments. Further to this, a summary of arguments made in the first half of the report is provided at the beginning of the second part. While this undoubtedly becomes repetitive, it is intended as ease of reference to the reader.

Chapter 2: Social Justice

Overview

As discussed in the introductory chapter, there are two aspects or dimensions of justice under investigation in the current study, that of social and organisational justice. Of the two of these, social justice can be understood to be the broader – it has as its focus the wider social institutions and systems of which the workplace forms one constituent. Given this predominance, it seems logical that an understanding of social justice will contribute to an understanding of organisational justice. The theoretical underpinnings of the current research will begin, therefore, with an exploration and critical discussion of the notion of social justice.

This chapter has one primary aim, that is to chart the history of the study of social justice in order to provide a 'map of the terrain' – where does the study of justice have its roots and how has thinking in this area developed and changed over the years. While the first questions asked about justice originate in what we now know as the discipline of philosophy, the study of justice has evolved into a multi-disciplinary concern, with, among others, sociologists, political scientists, educationalists, lawyers, geographers, and psychologists applying themselves to the exploration of this topic. It would appear that most researchers start from a very similar base when exploring questions about justice. As discussed in Chapter 1, that is with an understanding that justice is an emergent characteristic of social aggregation that occurs as people identify important common elements in one another, and recognise the need for coexistence. This coexistence allows for the creation of individual and group resources, which include not only material goods, but also conditions such as status and social opportunity. The basis upon which these resources are distributed to the members of the group is complex and becomes contested, particularly given the increasing intricacy of social

aggregation. As such, the development of these forms of social coordination is accompanied by the development of moral codes that underpin the differential allotment of goods and conditions to individuals or groups (Vermunt & Steensma, 1991**)**. Justice is, therefore, generally understood to be about the ways in which the benefits and burdens of social co-operation are distributed among group members. Despite this common point of departure, different disciplines have followed a varied and wide-ranging research trajectory with regards to social justice. This chapter aims to focus in particular on the psychological study of social justice – that is the emphasis is on psychology's attempts to understand justice as a social phenomena, rather than an individual developmental concern. In doing this a psychological framework for understanding justice will be used, one that understands perceptions of justice to comprise distributive, procedural, and interpersonal concerns. Distributive justice is understood to concern itself with "…the distribution of the conditions and goods which effect individual (psychological, social and economic) well being" (Deutsch, 1975, p137), procedural justice with the perceived fairness of procedures used to reach distributive decisions, and interpersonal justice with the quality of treatment an individual believes he or she has received from decision makers (Leung, Chiu and Au, 1993), and the perceived fairness of the symbolic and intangible outcomes of procedures (for example respect) (Folger and Konovsky, 1989). It is important to note that this is a psychological model, and is not one that easily crosses disciplinary barriers. So while psychological theories of justice fit more neatly into this framework, philosophical theories included in this chapter are more awkwardly located. Despite this, the framework represents dominant psychological thinking within the area of justice, and it is criticisms of this framework that form the point of departure for this study. For this reason, this chapter will use the structure of the tripartite model, firstly, as a way to structure the historical discussion of the study of justice, but also to introduce concerns about the structure itself. Given that

psychological research into the area of justice is so prolific and that the discussion in this chapter aims to provide an historical overview, the focus will be on presenting seminal research.

This chapter begins with a discussion of distributive justice, the first aspect of justice to receive attention by theorists. Work in this area attempted to explore what constituted the rules or values of distributive justice. The point of departure for this discussion is the philosophical study of justice, where the earliest theories of justice began and from which the psychological studies of justice emerge. An initial discussion of the key debates within philosophy that have given rise to current day thinking and research is provided. This begins with an overview of utilitarianism and Rawls' (1971) libertarian response to this once dominant set of principles. Further, it explores how, despite being fundamentally in opposition to one another as far as their normative arguments about the principles along which social goods should be distributed are concerned, these theories arguably have common understanding of the scope of justice – an understanding that has been criticised as being narrow and static.

It is at this juncture that social psychology's early attempts to address concerns about justice begin. These initial discussions took place at approximately the same time that Rawls (1971) was formulating his theory of justice, and they mark an attempt to develop a theory about the actual standards that people use when making justice judgements as opposed to the normative discussions emerging from philosophy. This split between the psychological and philosophical approach to the study of ethics was precipitated by Moore (1903) with the introduction of his notion of the naturalistic fallacy – "…the fallacy of conflating what people ought to do with what people actually do" (p. 1). Moore (1903) asserted that there is no or little relationship

between “what we ought to do” and “what we do do”, and he thus proposed that the study of ethics (the study of what we ought to do) bore no relation to psychology (the study of what we think that we actually do). He clearly distinguished between the normative and the descriptive in this regard, and said that any conflation of these two notions would be committing the ‘naturalistic fallacy’. This view appears to have largely dominated thinking and research among psychologists and philosophers even up to the current day. In a book aimed at reviewing social psychological justice research over the past twenty years, Cropanzano and Greenberg (1997) state, “In keeping with social science tradition, our treatment of justice is completely descriptive in orientation … This is in contrast to the large body of work in moral philosophy… which is inherently prescriptive, specifying what should be done to achieve justice” (1997, p. 318). While this is a somewhat debated and contested division, with many philosophers and psychologists wishing to link morality and psychology as it is argued that an understanding of the way people actually make moral judgements is crucial for understanding what good moral judgements are (May, Friedman, & Clark, 1996), the psychological study of justice is dominated by descriptive, empirical research.

The discussion of the psychological study of distributive justice starts with a focus on equity theory, which marks social psychology’s first attempts to develop a theory of justice. This theory was developed and expanded in a number of stages - first by the work of Homans (1961) then by Adams (1963, 1965) and Walster, Berscheid and Walster (1973), and finally by Jasso (1977, 1978, 1980). It posited a model of weighing inputs against outcomes as the basis for justice judgements, and thus laid the foundation for an approach to justice that is, to this day, considered fundamental. One of the central concerns with equity theory was its assumption that people are essentially selfish and as such it understood justice perceptions to be based on self-interest. Two major challenges to this notion are discussed in this chapter.

The first came from Deutsch (1985) who argued that equity was not the only value that underpinned distribution decisions and that equality and need also form the basis for decision-making, and the second from Lerner (1980) who rejected notions that concern about justice emanate from egoistical self-interest and who developed the 'just world hypothesis' as a response to these concerns.

While this body of work focussed most specifically on questions of distributive justice theorists challenged this singularity of focus, and began emphasising procedural concerns. The chapter thus moves on to looking at procedural justice theories, starting with Nozick (1974). Emanating from criticisms of Rawls' (1971) theory of justice, Nozick (1974) introduced a Procedural or Entitlement Theory of Justice. While also a libertarian, Nozick (1974) argues that any understanding of justice cannot be ahistorical or focus on an end state of distribution as Rawls (1971) does. He therefore promotes a 'procedural' understanding of justice, one that considers past patterns of distribution and accounts for how people have come to acquire the goods that they have. A similar shift in thinking was wintnessed within psychology, which began focussing on procedural concerns. This focus on what became known as the second dimension of the tripartite model - procedural justice – began with the work of Thibaut and Walker (1975), and was extended by and Folger (1977) and Leventhal (1976). These theorists all focussed on characteristics of the procedures used to make outcome decisions, and the impact such procedures have on perceptions of fairness. Thinking in the area of justice thus centred on this bipartite model until the 1980's when Bies (1987) introduced the notion of interpersonal or interactional justice. There has been extensive debate over whether this dimension of justice is separate from procedural justice concerns, but for the most part this facet of justice has emerged as a third aspect of what has developed into a tripartite justice model. In concluding the historical account of social psychological

research into justice, two interpersonal justice theories, that of Bies (1987) and the group-value model posited by Lind and Tyler (1988), are discussed.

As stated earlier, while it is the primary aim of this chapter to map the terrain of social justice research, this is done in order to argue a number of points central to the current research. Firstly this chapter will argue that the psychological study of justice has emerged from a linear and somewhat economic understanding of the construct, the fundamentals of which still persist in current approaches to the topic. This type of model, seen in the tripartite model described, may be considered over-simplified and not necessarily reflective of the way in which people experience justice, and as such limited in its usefulness for answering a range of questions. It is also argued that this reductionism is echoed in the methodologies used to research justice as a construct. In addition through the review of the literature it will be argued that this tripartite model is, to some extent, reliant on an apriori understanding of justice – theorists have developed a construction of justice that they bring to bear on their research, thereby continuously supporting the original theoretical structure. Thus it is an aim of this chapter to argue that research is needed that attempts to tease out some of the real world complexities that could be brought to bear on an understanding of justice.

Distributive Justice

As discussed above, the first aspect of justice to receive attention by theorists and researchers was that of distributive justice, which has its roots in the philosophical study of ethics (Singer, 1994). As discussed in Chapter 1, questions central to this field of enquiry are what ends fully rational beings such as ourselves ought to choose and pursue, as well as what moral principles should govern our choices and pursuits (Audi, 2001). It would appear that it is this second

question that has dominated much of the early work in the area of justice, both within philosophy and psychology – philosophers ask what values ought to underpin our distribution of benefits and burdens within a society, and psychologists attempt to explore what values people do use when making such distributions.

Sidgwick (1907) proposed three ways in which ordinary people make decisions about moral behaviour. The first is encapsulated in the theory of intuitionism (that people will know intuitively what is the right or wrong thing to do). The second method is related to the concept of philosophical egoism (that we should act in order to maximise our personal good), and as will be seen further on in this chapter, it is this understanding of human nature that formed the foundation for psychological thinking in the area of justice. The third method is related to utilitarianism (we should maximise the good for everyone affected). It is this third approach that up until relatively recently has dominated thinking about distributive justice, particularly within the discipline of philosophy.

Utilitarianism can be seen as the extension of the principle of philosophical egoism - an extrapolation of one person choosing to maximise their own good to maximising good for the whole group. The central idea of utilitarianism is that society is just when its major institutions are arranged so as to achieve the greatest total satisfaction summed over all the individuals belonging to it (Rawls, 2000). As such they understand the just action in any situation to be the one that brings about the highest possible total sum of utility (Wolff, 1996). The meaning of utility is understood differently by different theorists, and includes definitions such as happiness, pleasure, or satisfaction. Utilitarian theorists would suggest that a just action is one that maximises happiness, pleasure, or satisfaction (depending on their understanding of utility) for the people concerned, more than any other action available at the time (Wolff,

1996). Such an approach calls for some way of being able to measure utility, and to compare the utility of one action to that of another. The complexities of such a need is referred to as the problem of 'interpersonal comparisons of utility" (Wolff, 1996). This concern, however, is only one of the problems with utilitarianism identified by critics.

Few justice theoreticians would now accept utilitarianism as a suitable principle of justice, as it is argued that it has morally unacceptable consequences. Key opponents of this approach claim that utilitarian morality allows, or even requires, injustices (Wolff, 1996). One key difficulty is that of the 'scapegoat objection'. An example of this is where critics ask us to imagine there has been a terrible act of terror, where many people are killed and injured. The public is angry and panicked and wants the assurance that such an attack will not reoccur. As such the police are under a tremendous amount of pressure to apprehend the perpetrators. There is no question that under these circumstances the greater good would be served by the arrest of the guilty parties. However, the greater good would also be served if people believed by the public to be the perpetrators were arrested, found guilty, and imprisoned. Whether guilty or not, plausible suspects being caught would satisfy the public need for vengeance and a belief in their own security. While a couple of innocent people might suffer by being wrongly imprisoned, the greater good of the community would be served, and this, in utilitarian terms, would outweigh the negative consequences. The key criticism thus levelled against utilitarianism is thus that some miscarriages of justice would be defensible within their terms.

Much of the thinking about justice over the past forty years has been shaped by reactions to utilitarianism. Possibly the most noted of these responses is the one proposed by Rawls (1971) in his theory of 'Justice as Fairness'. Rawls (1971), a Libertarian, prioritises the rights

and liberties of individuals as being inviolable. The primary aim of Rawls' (1971) theory was to provide an alternative conceptualisation of justice to that of utilitarianism. It is this paradigm that has formed the foundation for much of the current debate about the nature of justice, and it is from this basis of libertarianism that the thinking about justice has changed, broadened, and been challenged by a range of theoreticians, including economists, political scientists, political and moral philosophers, as well as feminist writers.

Rawls' (1971) theory, in the tradition of Kant and Rousseau, is a social contract theory which takes the view that an (often tacit or unspoken) agreement exists between people in a community or between people and their leaders, about the creation of political institutions, which then define the obligations of the parties to the contract (Audi, 2001). Rawls (1971) makes use of the idea of a social contract, particularly with reference to the agreements between individuals in a community, to define and justify his conception of justice.

Contractarian theories, such as Rawls' (1971), are individualistic in that they assert that moral and political policies must be justified in relation to the needs and rights of individuals. As such they stand opposed to utilitarian theories with their emphasis on maximising benefit for the entire community over that of the individual (Audi, 2001). Rawls' (2000) anti-utilitarian stance regarding the conception of justice is central to his theory - in the preface to his book he states that the aim of his theory of justice is to provide a viable alternative to that of utilitarianism, something he views previous critics of utilitarianism unable to do. It is with this anti-utilitarian stance that Rawls (2000) lays the foundation for his theory of justice. He states that, "Each person possesses an inviolability founded on justice that even the welfare of society as a whole cannot override. For this reason justice denies that the loss of freedom for some is made right by a greater good shared by others" (Rawls, 2000, p. 3). He asserts that in a

just society the liberties of equal citizenship are taken as agreed upon and an injustice is justified only when it prevents a greater injustice.

Rawls (1971) defines the scope of his theory as pertaining specifically to that of social justice, which he differentiates from other justice concerns. He acknowledges that it is not only laws, institutions, and social systems that can be considered just or unjust, but people, actions, decisions, accusations, even attitudes or traits. Social justice, however, focuses on the basic structure of society, and more specifically on the ways in which the major institutions of society distribute basic rights and duties as well as the benefits resulting from social co-operation. In this way he differentiates social justice from questions about justice in other, possibly smaller, contexts. This question of differentiating different 'types' of justice and exploring the way in which these 'types' might articulate with one another, is central to the aims of this study, and is discussed in more detail in Chapter 3, where the notion of organisational justice as something separate from other 'types' of justice, such as social justice, is debated. This focus on social justice is based on what Rawls (2000) considers to be its primacy in influencing the life prospects of people. He states that, " The intuitive notion here is that [the] structure contains various social positions and that men born into different positions have different expectations of life determined, in part, by the political system as well as by economic and social circumstances. In this way the institutions of society favour certain starting places over others" (Rawls, 2000, p. 7). Social justice applies to these inequalities. Given the profundity of the effects of these structures, Rawls (2000) has identified them as the primary subject of justice.

Since this is his focus, Rawls (2000) concentrates his theory on the distribution of what he terms 'primary goods' - the things that could be supposed a rational man would want more of,

rather than less. These goods would ensure a person greater success in advancing their own ends. He identifies primary social goods to be rights, liberties, opportunities, income, and wealth (Rawls, 2000). He argues that their primacy is evident, and they can be termed social due to their inherent connection with the basic social structure – the rules of major institutions of society define liberties and opportunities and regulate the distribution of wealth (Rawls, 2000).

Rawls (1971) argues that justice is fundamental to any society because it helps to regulate the collective life of people. This assertion stems from Rawls' (1971) view of society as a relatively self-sufficient association of people who recognise that certain rules of conduct are binding, and for the most part act in accordance with these rules. This is so because such rules ensure a system of co-operation that will work to everyone's advantage, and are necessary because there are competing interests or claims in any society. As such society is characterised by a mutuality of interests (an individual can live far better in association with a society then he/she could on their own) as well as conflict (as there are competing claims to the benefits and burdens that the association of people produces). As such, a set of principles is needed to guide the distribution of the advantages. It is these principles that Rawls (1971) asserts are the principles of social justice in that they enable societies to assign rights and duties to their members, as well as to define the most appropriate way in which to distribute the benefits and burdens of social co-operation. (Rawls, 1971). As discussed in the introduction to this chapter, it is this understanding of society and human functioning that underpins most work in the area of justice, both within philosophy and psychology.

Rawls (1971) contends that the principles of justice are central to keeping a society functional. He states that a society is well ordered if, among other things, it is regulated by an accepted

conception of justice, i.e. the same principles of justice are accepted by all, and the social institutions of that society satisfy, and are seen by its members to satisfy, these principles. Where there are divergent interests, a shared conception of justice ensures "civic friendship" (Rawls, 2000, p. 5). Unfortunately this is seldom the case, as what constitutes justice is often disputed. However, despite the disagreement on the actual terms or principles of just distribution, there is still agreement on the need for a set of principles.

Rawls (1971) thus differentiates between the concept of justice (i.e. the recognition of the need for a set of principles for the allocation of rights and duties and for the proper distribution of the benefits and burdens of social co-operation) and conceptions of justice (i.e. the nature of these principles). He states that even if people have different conceptions of justice, they can still agree on a common concept of justice. He proposes that all people can agree that " …institutions are just when no arbitrary distinctions are made between persons in the assigning of basic rights and duties and when the rules determine a proper balance between competing claims to the advantages of social life" (Rawls, 2000, p. 5). What constitutes 'arbitrary distinctions' and 'a proper balance' are open to interpretation based on the principles of justice that are found to be acceptable – it is these that comprise the conception of justice. As will be seen further on in this section, much of the social psychological exploration of justice aims at understanding what conceptions of justice operate in the social world – i.e. what principles do people use in determining whether justice has been served. Rawls (2000) goes on to say that these principles identify specific similarities and differences between people that are considered relevant when determining rights and duties. As discussed in the introduction the current study aims at exploring how one such category of similarities and differences – that of demographic variables – do impact on peoples' experiences of justice, both in their social and organisational worlds. Demographic variables such as race, gender,

religion, and age have historically been used, often unjustly, as a way of determining differential distribution of benefits and burdens in a society as well as its sub systems. At a broad level this can be seen in, for example, the Apartheid government's use of race to account for differential allotment of goods and conditions to millions of people, the Third Reich's use of religion, nationality, and sexual preference as a way of perpetuating genocide, or countries that prohibit access to state and societal resources on the basis of gender. Broader social practices that use demographic variables as a way of determining rights and duties filter down to smaller systems where, for example, in the workplace women might receive different wages for doing the same jobs as men or older people might be prejudiced in job selections. The relationship between demographic variables and experiences of justice will be discussed in more detail in Chapter 4.

In his theory, Rawls (1971) examines principles of justice based on the question "What would an ideal society be like?" (i.e. 'complete compliance theory') as opposed to addressing questions about how to deal with injustice (i.e. a 'partial compliance theory' that concerns itself with corrective justice, retributive justice, punishment, and notions of a just war). Given this concern, he sets out to argue for a set of principles of justice that would govern a well-ordered society, where everyone is assumed to be acting in such a way as to uphold just institutions. The central idea of Rawls' (1971) theory is that the principles of justice for the basic structure of society are "…[those] principles that any rational person, aiming to further their own goals and needs, would accept in an original position of equality as being the principles that will govern their association" (Rawls, 2000, p. 10). In this theory, as in the social contract theories of Kant and Rosseau, the original position (or 'state of nature') is a hypothetical situation, and is not intended to represent an actual or historical account of events. In this hypothetical situation no one knows his/her place in society. They don't know

their class, position, standing as well as their strengths or weaknesses, intelligence, abilities, or any of their other natural assets.

The principles of justice are chosen in this state – behind a veil of ignorance. Under these conditions any agreement reached on the principles of justice is fair, as no one can attempt to favour themselves: they are all similarly situated without any knowledge of what position they will assume in society. Parties in the original position are equal, and all parties have the right to suggest and decide on principles. This original position is one that is fair to all participants, and is a suitable status quo from which to begin. Rawls (1971) termed this the notion of 'justice as fairness' – " …that parties to a common practice are understood to have an basic and equal liberty and that their common practices be considered unjust unless they accord with principles which persons so circumstanced and related could freely acknowledge before one another, and so could accept as fair" (Rawls, 1958, p. 70).

Rawls argues that the principle of utility is not compatible with this idea of co-operation between individuals for mutual advantage. He argues that an individual in the original position is unlikely to agree to the chance of living a lesser life so that other parties may have a better life (Rawls, 2000). Instead he argues that people in the original position would choose two principles: firstly that every person participating in or affected by a practice has an equal right to the most extensive liberty compatible with a like liberty for all (i.e. the maximum amount of liberty before it starts infringing on the liberty of others), and secondly that inequalities are arbitrary unless it is reasonable to expect that they will work out for everyone's advantage, and provided the positions and offices to which they attach, or from which they may be gained, are open to all (Rawls, 1958, p. 48).

The first principle is termed the Liberty Principle, and it refers to those institutions that define and secure basic liberties in a society – it is concerned with political and civil rights (Barry, 1973). Rawls (1971) identifies a number of basic liberties that he sees as being important, including political liberty, freedom of speech and assembly, liberty of conscience, freedom of thought, freedom from psychological oppression and physical assault, freedom from arbitrary arrest, and the right to hold personal property. According to the first principle, all these liberties should be equal. Liberties that are not basic, such as the right to own property, are not protected by this principle. The second principle refers to the institutions that specify social and economic inequalities, and is concerned with distribution of wealth, as well as the arrangement of organisations that utilise differences in authority and responsibility. Rawls (1971) structures this principle according to two parts, which he terms the Difference Principle and the Fair Opportunity Principle respectively.

The Difference Principle states that the distribution of wealth and income need not always be equal, but that if it is not, it must be to everybody's advantage. As such this principle outlines what inequalities would be permissible, when the presumptions of the first principle, that of equal liberty, could be set aside. Rawls (1971) argues that while there must always be a justification for departing from the initial position of equal liberty there can, and often is a justification for doing so - i.e. there may be different positions or distributions in a society, but that in itself is not a divergence from the principles of justice. The Fair Opportunity Principle states that the positions to which special benefits or burdens are attached must be open to all and must be obtained on the basis of fair competition. Even if a person benefits from a position being filled, but they had no access to that position, they would be justified in feeling unfairly treated. Once again, pertinent to the current study is the argument that the violation of these two principles is often based on demographic variables. An example of this in relation to

the Difference Principle is how race was used as an explanation for differential practices of the Apartheid state, or gender for the differential treatment of men and woman in a society. Demographic variables can also be seen to be used to violate the Fair Opportunity Principle in that many public positions have been denied to people on the basis of race, gender, social class, marital status, and even age. This relationship between demographic variables and perceptions and experiences of justice is discussed in more detail in Chapter 4.

Rawls (1971) thus argues for a conception of justice as a composite of three ideas: liberty, equality, reward for services contributing to the common good. This plurality of principles raises the issue of the ordering or weighting of these principles: which principle, if any, should supersede the other if a conflict exists? This dilemma is referred to as 'The priority problem", and needs to be considered by any theory attempting to account for a conception of justice. Opposed to using a utilitarian standard (i.e. the principle that will maximise benefit for the majority of members should take priority over other principles) Rawls (2000) attempts to provide an alternative view. He acknowledges that we will need to use some degree of intuition to settle questions of priority, but emphasises that such questions are primary to a common conception of justice, as parties with different ideas of principle priority do not share a common conception of justice. Given the importance of this matter, Rawls (2000) argues that we should attempt to reduce the extent to which we rely on intuition by formulating explicit principles for resolving the priority problem (Rawls, 2000). As such he offers some possibilities with regards to the ordering or weighting of principles.

The first possibility is that the matter of principle weighting must be agreed upon in the original position, as an inherent part of formulating a conception of justice. The second possibility is based on what Rawls (1971) terms 'lexical' or lexicographical' ordering. This is

an order that requires the satisfaction of the first principle before one can move onto the second and so on. A principle does not come into consideration until all those ordered above it are met or do not apply. Rawls (1971) ranks the principle of equal liberty above the principle that regulates economic and social inequalities – in other words society should arrange inequalities of wealth and power in ways consistent with the equal liberties required by the first principle. He also ranks the Fair Opportunity Principle over the Difference Principle. As such the Liberty Principle has 'lexical priority' over the other two principles, the Fair Opportunity Principle priority over the Difference Principle (Wolff, 1996). This is a marked divergence from a utilitarian principle, as this ordering means that the liberties protected by the first principle cannot be violated for the greater social or economic advantage.

Very little empirical testing of Rawls' (1971) theory has been conducted. Frolich, Oppenheimer, and Eavey (1987) state that the testing of ethical theories is essential, particularly if such theories implicitly contain a model of human psychology as they argue Rawls' (1971) does. They argue that a theory such as Rawls' (1971) is based on the presumption that a reasonable person can be convinced of its claims, and as such it then becomes necessary to specify what constitutes the psychology of such a reasonable person (Frolich et al, 1987). In addition they state that if the impact of an ethical theory derives from the projected consequences of its rules, then such an impact can only be compelling if the consequences mirror the real world – and as such testing of such theories is imperative (Frolich et al, 1987).

In response to this identified need, Frolich et al (1987) conducted an experiment that aimed to test what they termed the behavioural underpinnings of Rawls' (1971) theory of justice – firstly whether people operating behind a veil of ignorance would be able to reach unanimous

consensus on a principle of distributive justice, and secondly whether they would show a preference for Rawls' (1971) Difference Principle. In this study a total of 44 runs of four experimental designs were conducted in three locations in America. In the first part of the experiment subjects were introduced to four principles of distributive justice, one of which was Rawls' (1971) Difference Principle. Subjects were then asked to rank the four principles in order of preference. Subjects were then presented with an income table that illustrated each of the four distribution principles for five different income groups. They were then asked to select one principle. After doing this subjects were then randomly allocated to one of the income groups on the incomes table, and were paid an amount in line with that income group and the principle that they had chosen. When they were paid they were also told what they would have been paid had they selected any of the other three principles. They were then asked to rank the principles in order of preference again. In the second part of the study subjects were randomly divided into groups of 5, and asked collectively to adopt, by a unanimous vote, a principle for their next payment. In this part of the experiment subjects again did not know to which income group they would be allocated and were thus operating behind somewhat of a veil of ignorance. Once again they were paid in relation to their chosen principle according to the random allocation of an income group. Students then once again ranked the principles in order of preference. Finally subjects answered a questionnaire designed to extract demographic, psychological, attitudinal and sociological data about themselves (Frolich et al, 1987).

Results from these 44 experiments supported Rawls' (1971) notion that people operating behind a veil of ignorance will be able to reach unanimous consensus on a principle of distributive justice. However there was very little support for Rawls' (1971) assertion that the principle of choice would be the Difference Principle. Under all of the experimental conditions

all the groups reached unanimous consensus, but no group ever selected the difference principle of maximising the lowest income as their preferred principle. With regards to the rankings of the four distributive principles, this difference principle has the lowest number of first place rankings and the highest number of last place rankings. This study thus indicates that people do not act in accordance with Rawls' (1971) assumptions.

Frolich et al's (1987) experiment was duplicated, with some minor modifications, by Bond, Doug and Jong-Chul Park (1991) who were attempting to explore whether there were any cultural differences in preferences for justice principle choice. The researchers used an American and Korean sample, and they found partial support for Rawls' Difference Principle among the Korean sample only. Another study using Polish and American samples found no support for Rawls' (1971) assumptions (Lissowski, Tyszka, & Okrasa, 1991).

A fifth study, conducted by Brickman (1977), attempted to explore whether people would be more likely to deviate from the principle of equality in the original position, as hypothesised by Rawls (1971). The study involved 80 groups comprising three undergraduate students who were competing for lottery tickets for a 100-dollar prize. In the first part of the experiment participants were asked to complete a test involving arbitrary exercises. At the end of the test each group was told that group members differed in ability (based on test results), but only half the groups were told who had scored high, medium and low on the test, while the other half were told nothing about members performance. Groups were then given a number of tasks to allocate to members, the successful completion of which would determine how many lottery tickets an individual would be given. Groups could either share the tasks equally or could allocate tasks to individuals, and were told how many tickets they could expect to win under each principle of distribution (i.e. if tasks were equally allocated or delegated). In half the

groups the unequal task assignment resulted in a net gain for the high ability person and in half a net gain for the low ability person, either without cost to anyone or at the expense of the person at the other end of the distribution. Results showed that knowledge of ability (position) made no difference when participants considered inequalities that would not cost anyone anything, or where inequalities would benefit the high-ability people. Knowledge of ability did, however, make a substantial difference when the inequality would benefit the low-ability individuals at the expense of the high ability individuals. Brickman (1977) concludes "…where possible, we should ask people to make moral decisions before they know with certainty their own standing and likely outcome in the situation" (1977, p. 303). He thus views the results as support for Rawls' (1971) assertion that people would be likely to deviate from the principle of equality from the original position.

Despite the importance of empirically testing theories such as Rawls' (1971), these five studies represent the bulk of research conducted in this area. Given the paucity of research testing Rawls' (1971) assumptions as well as the inconsistency of the results obtained, it is not possible to say with any conviction that there is, or isn't, empirical evidence for Rawls' (1971) theory. In addition to this these experiments may be considered starting points for this type of research, but they have fundamental flaws that make their value questionable. Firstly, as stated earlier in this chapter, Rawls (1971), while acknowledging that justice also pertains to people, actions, decisions, attitudes and traits, explicitly stated that his theory focussed on social justice i.e. the basic structure of society, and more specifically on the ways in which the major institutions of society distribute basic rights and duties as well as the benefits resulting from social co-operation (Rawls, 1971). In attempting to operationalise questions about distribution, it can be argued that these experiments reduce the questions of justice to more personalised decisions and actions. It cannot be assumed that people will respond in the same

way to questions about how society distributes benefits and burdens as they will to the distribution of lottery tickets or relatively small payments for arbitrary tasks. It could be argued that it would be almost impossible to operationalise the notion of the original position in relation to questions of social justice as Rawls (1971) understood it – as mentioned earlier in this chapter Rawls (1971) stated that the original position was purely hypothetical - and these experiments cannot, therefore, be said to be providing evidence for or against Rawls (1971) theory. They perhaps do contribute to an understanding of justice in other contexts, but this cannot be generalised to choices about primary social goods as described by Rawls (1971).

Secondly, while social psychological research is heavily indebted to the experimental paradigm, the limitations of such a research design are well documented (Rosenthal & Rosnow, 1991). While these are discussed in more detail later in this chapter and in Chapter 3, there are two such limitations that have particular relevance for these studies. The first relates to the artificiality of the experiments. The environments in these studies are contrived, and the tasks the participants were asked to conduct were unusual and perhaps even strange. This lack of ecological validity makes the findings of these studies difficult to generalise to other real life contexts. The second relates to the nature of the samples used. In all five studies the samples comprised university students, who cannot be considered to be representative of even the populations from which they were derived, let alone other populations. Because of these limitations, these experiments, while interesting attempts to empirically explore Rawls' (1971) theory, do not in any conclusive way provide an argument for, or discount, the validity of Rawls' (1971) assumptions.

Despite this lack of any supporting empirical evidence, it has been argued that Rawls' (1971) theory of justice has set the agenda for much of what is currently being written about liberal theories of justice (Audi, 2001). While he has many critics, it is generally agreed that he presents a powerful case for his theory as well as provides us with a "…revamped theoretical foundation for the dominant liberalism of our time, which is committed to personal liberty and to reducing social and economic inequalities" (Arthur & Shaw, 1992, p. 61). The importance of Rawls' (1971) theory is that it can be seen to have opened a debate about how individual rights can be respected concomitantly with principles of justice. In addition to this, by proposing a set of liberal (as opposed to utilitarian) values that might constitute one conception of justice, he provided a 'benchmark' of sorts – a liberal conception of justice against which other conceptions of justice can be argued. As will be seen from the ensuing discussion, social psychological attempts to explore questions about justice started from a similar basis as Rawls (1971) – by proposing and exploring different principles that might underpin perceptions of justice.

The study of justice within the discipline of psychology has fallen primarily into two areas – developmental psychology and sub-fields of social psychology. Within developmental psychology theorists have explored the ways in which people develop moral reasoning. The approach has been primarily cognitive in nature, and explores the ways in which people make decisions about what is moral or just, and what is not. This focus is on the intrapersonal aspects of justice, as it looks at factors internal to the individual in attempting to explain the development of morality. For example theorists such as Kholberg (1963) and Piaget (1932/1965) have looked at infant and child development, with a specific focus on how the capacity for moral reasoning evolves within children. Social psychologists, on the other hand, laid the foundation for research focussed on justice in the context of

interpersonal relationships through their exploration of the ways in which social forces governed such perceptions. It is the work that emanated from this field that is the predominant focus of the current study, and thus this chapter.

Justice as an important phenomenon for social life has only relatively recently been recognised by social psychologists. Deutsch (1985) argues that the term 'justice' was not even included in successive editions of the Handbook of Social Psychology, and that this subject only received attention by psychologists in the mid-70's. Theorising about and research in the social psychology of justice began with the development of equity theory, which remained the dominant approach in this area until the mid-1980's (Deutsch, 1985). These initial theories derived from the work of Aristotle - Homans (1961), the social psychologist who introduced the underpinnings of equity theory to social psychology, explicitly borrowed the term *distributive justice* from Aristotle's account of justice in *Nichomachean Ethics.* Homans (1961) thus understood justice to be concerned with the distributions of rewards among individuals and groups. He proposed that people experience injustice when they do not receive the amount of reward expected relative to the reward somebody else receives (Homans, 1961). This process of experiencing injustice as a result of comparing one's rewards with other people's rewards was termed relative deprivation – a term that Homans (1961) used as a synonym for distributive justice (Deutsch, 1985). Relative advantage, on the other hand, has now come to refer to exchanges where one receives more reward relative to others.

Homans (1961) further hypothesised that people expect their rewards, or outcomes, to be equal to their contributions to, or investments in, an exchange. As such they would expect to receive more reward if they have contributed more than others, and would expect to

contribute more if they are rewarded more. This 'rule of distributive justice' – "A man in an exchange relation will expect that the rewards of each man be proportional to his costs – the greater the rewards the greater the costs – and the net rewards, or profits, of each man be proportional to his investments – the greater the investments the greater the profit" (Homans, 1961, p. 75) – was defined by Homans (1961) and became the basis for initial research and work in the social psychology of justice.

Homans (1961) also hypothesised about people's responses to perceived relative deprivation or advantage. He postulated that a person who perceives himself to be a victim of injustice will experience some anger and express some hostility towards those who caused or benefited from the injustice. On the other hand, a person experiencing relative advantage and thus perceiving himself as a beneficiary of injustice will experience some guilt and will attempt to alter the proportions of the exchange by increasing their own contribution if possible. Homans (1961) further proposed that while people may agree on the rule of distributive justice, they may disagree whether particular instances of distribution are fair, as they may not agree on their assessments of the value of particular contributions or rewards. This is similar to Rawls' (1971) differentiation between the concept of justice (i.e. the recognition of the need for a set of principles for the allocation of rights and duties and for the proper distribution of the benefits and burdens of social co-operation) and conceptions of justice (i.e. the nature of these principles), and his statement that even if people have different conceptions of justice, they can still agree on a common concept of justice. Homans (1961) stated that people are most likely to assess whether they have been fairly treated by comparing themselves with others who are similar to them - who share nationality, aspects of demography, who work in the same organisation - rather than with those who are different.

Homans (1961) demonstrated the way in which his distributive justice theory operated by observing relations between 'cash posters' and 'ledger clerks' in the accounting department of an organisation he studied. The ledger clerks, while satisfied with their pay, felt they were being unjustly treated relative to the cash posters who were earning the same pay as them. The ledger clerks believed that their jobs were more senior and responsible than the cash posters, and as such they should be earning more money than them. They thus felt relatively deprived, which resulted in protests being made to management and their union.

Homans (1961) illustrated the rule of distributive justice in a number of different contexts, but it was Adams (1963, 1965) who extended these propositions and began developing their implications in a more systematic way (Deutsch, 1985). Adams (1963) substituted the term 'distributive injustice' with 'inequity', and as a consequence gave rise to the term 'equity theory' – the phrase used to characterise the original work done by Homans (1961) and expanded on by Adams (Deutsch, 1985). Adams' (1963, 1965) focus was specifically on what he termed exchange relations, and he used the employment relationship extensively in order to elucidate his theories. Despite this, he believed his ideas to be applicable to all kinds of social exchanges (Deutsch, 1985). So it is at this point that justice research began falling into the domain of organisational psychology, a point that will be further discussed in Chapter 3.

Like Homans (1961), Adams (1965) proposes that justice is upheld when the individual perceives that his/her outcomes (such as pay) are allocated in proportion to his/her perceived inputs. He avers that whenever an exchange occurs between two parties, the possibility exists that either party might perceive that exchange to be inequitable (Adams, 1963). Each party

brings certain contributions to the exchange, for which they expect a just return. These 'inputs' are as perceived by the contributor, and may not be congruous with those of the other party. An individual, for example, may perceive his relevant 'investments' into an employment relationship to be his intelligence, qualifications, and creativity, and will expect his financial remuneration to be in line with such inputs. If, however, his employer does not see one or more of those inputs, for example creativity, as being relevant to the exchange, it will not be taken into account when remuneration is calculated. Adams (1963) thus argues that inputs need to be both recognised and considered relevant by their recipient. If only the person possessing the attribute considers it to be relevant to the exchange, then problems of inequity will arise (Adams, 1963). Crozier (1960, in Adams, 1963) illustrates this point using an example involving Parisian bankers. Paris born clerks worked along side Province born clerks in a bank in central Paris, all doing identical work and earning identical wages. The Parisians were dissatisfied with their wages, as they perceived their Parisian breeding to be an input into the employment relationship that was deserving of financial compensation. The bank management did not see that attribute as being relevant within the exchange relationship and therefore did not afford them any more compensation than Province born employees.

In exchange for inputs, people expect certain rewards or 'outcomes'. Outcomes can include pay, status symbols, fringe benefits, and job status among many others. Similar to inputs, outcomes are as perceived by the parties, and can therefore also be characterised by recognition and relevance (Adams, 1963). For example, a manager might give an employee verbal recognition for having worked overtime in order to reach an important deadline. The employee does not see any utility in that outcome (praise), and therefore does not perceive it as relevant to the exchange. He would have preferred monetary compensation, which has

some utility to him, and is thus dissatisfied with the outcome. In contrast, however, another employee might feel that the praise has psychological utility, will thus see the outcome as being relevant, and we be satisfied.

It is clear that many factors may be considered to be inputs by the contributor, the recipient, or both. Adams (1963) identifies education, intelligence, experience, seniority, age, gender, social status, and ethnic background to be just some of the attributes that parties to the exchange may perceive as being relevant. He hypothesises that these 'principal inputs', as he terms them, vary in their degree of relationship to one another, with some being closely correlated to each other, and others functioning largely independently. For example, he suggests that an input such as gender is primarily independent of other inputs, while age may be highly correlated with seniority or experience. Clearly Adams (1963) recognises the importance of social position, gender, age and a range of other demographic variables in contributing to perceptions of justice. Despite this, neither Homans (1961) nor Adams (1963, 1965) elaborate on or hypothesise about the psychological interrelationships that might exist among the different inputs and outcomes. This becomes relevant to the current study, which has as one of its aims the exploration of the interrelationship between demographic variables and their association with experiences of justice. This will be elaborated on in Chapter 4, which focuses on this issue.

Adams (1963) extends beyond Homans' (1961) discussion of responses to inequity. He employs Festinger's (1957) Cognitive Dissonance Theory to explain reactions to perceived injustice by likening the consequences of inequity to those of cognitive dissonance – as with dissonance the perception of inequity creates a proportional tension which will motivate the person to eliminate or reduce it. The strength of the motivation is proportional to the

inequity tension. Adams (1965) hypothesised a number of different psychological strategies that a person might use in order to reduce inequity tension, including altering their own or others inputs and outcomes, altering ones perceptions of their own or others inputs or outcomes, withdrawing from the exchange relationship, or changing one's referent other. Adams (1965) went on to hypothesise about which of these tension-reducing strategies a person would be likely to adopt.

A considerable amount of research has been done, both by Adams (1963, 1965) and others, to test his hypotheses (Deutsch, 1985). There has been a particular focus on researching the hypothesis that inequity will be reduced by altering one's own inputs (Deutsch, 1985). Deutsch (1985) describes a series of experiments that were conducted by Adams and his colleagues (Adams and Rosenbaum, 1962; Adams, 1963; Adams and Jacobson, 1964) designed to test whether an employee who believes he has been over rewarded will firstly experience inequity tension, and secondly will attempt to reduce such tension by increasing their inputs. These experiments were conducted using samples of students who were employed to proofread galley pages. Students were divided into two groups, one of which was a high inequity condition – students were encouraged to believe that they were not qualified to earn what they were being paid – and the other a low inequity condition – where students were led to believe that they were adequately qualified to earn their pay. Results indicated that those who believed they were being overpaid (the high inequity group) increased their inputs, either the quality or the quantity of their work, relative to those who believed they were being equitably paid (the low inequity group). A similar series of experiments also provided evidence for the hypothesis that people believing themselves to be underpaid would be likely to reduce their inputs in order to rectify the inequity tension (Deutsch, 1985). Similar to the experiments carried out by Frolich et al (1987) described

earlier in this chapter, this research is also based on student samples within a laboratory type setting, which, as mentioned previously, raises a number of similar concerns. These are discussed in detail in Chapter 3, as such criticisms apply to a wide range of social psychological justice research.

Adams' (1963, 1965) main contribution to equity theory was characterising processes involved in reducing inequity tension (Deutsch, 1985). Walster, Berscheid and Walster (1973) identified the need for what they termed a more general social psychological theory, and thus attempted to extend the work being done in equity theory. They put forward four propositions that formed the core of their theory. The first proposed that individuals will try to maximise their outcomes, the second that groups will maximise collective reward by developing systems for the equitable distribution of rewards and costs among members and will induce members to adhere to such systems by rewarding those who treat others equitably and punishing those who treat others inequitably, the third that individual become distressed when participating in an inequitable relationship, with the distress being proportional to the extent of the inequity, and finally the fourth that individuals in an inequitable relationship will attempt to restore equity in order to eliminate their distress, trying harder the more distress they feel (Walster et al, 1973).

These principles appear to combine the arguments of both Homans (1961) and Adams (1963, 1965), and were clearly an attempt to develop a comprehensive equity theory. These principles thus embody much of the work done in the area of equity theory, and as such many of the criticisms of Walster et al's (1973) principles can be extended to the work of both Homans (1961) and Adams (1963, 1965) and equity theory in general. Such criticisms can therefore, possibly be best understood by looking at equity theory as a whole.

Equity theory contributed three main notions to the psychological study of justice. The first relates to an understanding of human nature and the notion of justice perceptions being closely linked to self-interest. It is clear that a number of assumptions about human nature and society underpin the propositions put forward by equity theorists, particularly Walster et al (1978). A first assumption is that man is essentially selfish, while a second is that these selfish people, in competition with one another, will collectively attempt to maximise reward for their group. Thus equity theory can be understood to be based on the principles of philisophical egoism and utilitarianism - as described earlier in this chapter – in that it asserts that that people act to maximise their own good as well as the good of everyone affected. It can, therefore, be argued that social psychological theory was initially influenced by the dominance of utilitarianist thinking within philosophy, and as will be seen, went through a similar challenge to its underlying assumptions. A third assumption of equity theory is that man is largely rational (Deutsch, 1985). All these assumptions have very little support, both empirically as well as anecdotally (Deutsch, 1985; Lerner, 1974, 1975). Lerner (1980) rejects the assumption that concern about justice is actually a reflection of egoistic self-interest. He argues that justice perceptions are, in fact, central organising themes in people's lives that emanate from early development where children learn to forgo immediate gratification for the promise of more desirable future outcomes (Lerner, 1980). An alternative perspective was also put forward by Folger (1998) who proposes that people care about justice because they have a basic respect for human worth and dignity. He argues that people care about justice even when there is no apparent economic benefit to them for doing so. In this view, as is argued by Rawls (1971), justice is seen as a virtue in itself.

The second notion that equity theory proposes is that people will respond negatively to, and will attempt to alleviate negative affect resulting from, perceived injustice. The second proposition has received general consensus and is supported anecdotally as well as by research albeit somewhat sparse (Deutsch, 1985, Adams & Freedman, 1976; Ross, Thibaut & Evenbeck, 1971; Austin & Walster, 1974). This proposition is not the site of contestation. It is the third notion - that a society will agree that equity is the appropriate basis upon which to distribute benefits and burdens – that has been the source of extensive disagreement (Furby, 1986). It is argued that inequity cannot be equated with injustice, as there are standards of justice other than the equity rule that can be used in making justice judgments. Deutsch (1985) argued that up until the mid-eighties theorising and research into the social psychology of justice had been heavily dominated by "…the assumption that equity is the sovereign principle of distributive justice" (Deutsch, 1986, p. 172). It is this criticism that has evoked the most cohesive response to equity theory. Lerner (1974), Leventhal (1976), Sampson (1983) and Deutsch (1975) propose a number of different values that could underpin the distributions of benefits and burdens. These include, among others, on the basis of need (those who are more needy will be entitled to more than those who are not), equality (goods get distributed equally to all members of the group), ability, according to the social value of their contribution, and on the basis of what is best for the common good (a utilitarian principle). A focus of post-equity distributive justice research has been to specify when different standards are employed (Furby, 1986). Deutsch (1975) proposed that equality and need were two important distributive values, and he hypothesised the following: equity will be the dominant principle of distributive justice where economic productivity is the dominant goal; equality will be the dominant principle of distributive justice where enjoyment of social relations is the common goal; and need will be the dominant principle of distributive justice where personal development and welfare is the common goal.

Some attempts have been made to test these, and similar, hypotheses (Mann, Radford, & Kanagawa, 1985; Skitka & Tetlock, 1992; Notz & Starke, 1978). For example Pratto, Tatar and Conway-Lanz (1999) explored how people allocate social resources between meritorious and needy parties i.e. the extent to which allocations were based on principles of equity or need. They argued that merit and need are two dominant societal ideologies, and as such these two principles would be invoked by people in order to justify allocation decisions. They further hypothesised that when the social context has not made clear which of these two values to use in making an allocation decision, people's social values and ideological habits will influence which principle they invoke (Pratto, Tatar and Conway-Lanz, 1999). In a series of four experiments, a sample of university students read a number of scenarios that asked them to imagine that certain allocation decisions needed to be made, and which set the need and merit principles in opposition to one another, i.e. for each scenario subjects had to make an allocation either to a meritorious group or a needy group. Once they had made their decision they were asked to write a few sentences explaining why they had made that particular choice. In order to assess ideological habits of the participants, each student completed a Social Dominance Orientation questionnaire that assesses whether people prefer group-based equality or group based inequality (with a low score indicating a preference for group-based equality and a high score indicating a preference for group-based inequality). Results indicated that participants with a high social dominance orientation favoured meritorious parties in contrast to participants with a low social dominance orientation who favoured needy parties. In addition to this, in their written responses explaining the reasons for their choice, participants provided ideological reasons for their decisions based on the values of merit and need. The authors argue that unlike Walster et al (1973) who claim there is one psychological principle that people feel is just, or like Deutsch

(1975) who asserts that the justice principle will differ based on context, they are arguing that different people's orientation towards social relationships influence the justice principle they believe to be fair (Pratto, Tatar and Conway-Lanz, 1999).

Clearly this is still a much contested space, one that is, in fact, unlikely to be resolved to everyone's agreement. This type of debate is essentially a normative one in that it is an attempt to develop a conception of justice i.e. the thrust of efforts in this area is to determine what constitutes someone's (or group's) due. Is it based on what they contribute, or what they need, or alternatively should it be based on equality, or any other range of values thought of by researchers and theorists? In this way psychological research into distributive justice somewhat resembles the efforts of philosophers such as Rawls (1971). As indicated earlier in this chapter, Rawls' (1971), in his theory of justice, attempts to argue for a conception of justice that can be seen to be based on notions of equality and need. Despite centuries of debate about what justice is, or ought to be, there is still no common consensus either within disciplines, or between them. This is, perhaps, unsurprising. As hypothesised by Deutsch (1975) and somewhat supported by research, the values that underpin justice judgements are not consistent for all people in all contexts. This is perhaps one of the most salient observations to emerge from efforts in the arena of distributive justice.

While some theorists and researchers were contensting the notion of equity as the basis for justice judgements, other theorists responded to equity theory by emphasising the need for a broader approach, one that moves beyond distributive concerns and focuses on the roots of justice perceptions i.e. how do people develop a concept of justice? In this regard, Lerner (1980) proposed his just world theory. Based on his observations of North American adults (Furby, 1986), Lerner (1980) proposes that people need to believe that the world is a fair

place, where people get what they deserve. He argues that this belief in a just world develops as a result of childhood developmental experiences, where children learn that it is often advantageous to delay gratification for some deferred greater pleasure (Lerner, 1980). By doing this children learn to anticipate different consequences for different kinds of actions, as well as to anticipate or expect certain outcomes if they meet the preconditions for obtaining them (Furby, 1986). These expectations in turn form the basis for the concept of deserving and entitlement, where a person should be entitled to particular outcomes if they fullfill certain preconditions (Furby, 1986). However, in order to sustain this understanding of exchanges, Lerner (1980) argues that people need to believe in a constant and consistent environment in which everyone gets what they deserve.

By extension, a belief in a just world suggests that people will have a need to believe that fortunate people have deserved their reward, while victims of misfortune will have done something bad to deserve such a fate. As such when one is faced with seeming injustice i.e. the suffering of innocent victims, people with a high belief in a just world will tend to derogate the victim (i.e. find some way in which the victim 'deserved' the misfortune) in order to avoid a cognitive imbalance that would threaten their belief in a just world. This is because a disruption in such a belief would imply that they too could be the undeserving victim of some misfortune. Believers in a just world are therefore invested in upholding and protecting their faith, even in the face of incongruent or disrupting evidence (Dion & Dion, 1987). Lerner and Miller (1978, cited in Furnham and Procter, 1992) postulate that this ontological cathexis in holding a belief in a just world may serve such an important 'adaptive function' so as to be considered a personality variable.

While Lerner's (1980) theory generated considerable interest and research, it also has become the site of much contention. Such contention centres around the extent to which belief in a just world can be considered a personality trait or rather a normal reaction to the functioning of a society. Critics of Lerner (1980) have argued that North American adults are not a generalisable population group, and that this theory does not account for societies in which actual injustice exists. As such to assume that the belief in a just world is the function of personality (an intrinsic and stable characteristic of the individual) rather than of the social context in which people find themselves is to negate the reality of actual injustice. In other words, many people might have a low belief in a just world because the world in which they live is in fact unjust. For example Furnham (1993) conducted research in 12 societies in order to explore differences in belief in a just world. He found that people in wealthier and more prosperous countries had a much higher belief in a just world than those in poorer and disenfranchised countries. He argues that "…some people believe in a just world because of their personal pathology and experiences, but there is evidence that just world beliefs are a function not only of a personal experience, but also of societal functionalism (i.e. a country's societal and structural factors)." (Furnham, 1993). At best, the notion that the belief in a just world is a function of personality has received very qualified support (Joseph & Stringer, 1998).

Despite these concenrs, the notion of a belief in a just world elicited interest from researchers in relation to a number of concerns. One such focus has been the relationship between the belief in a just world and individual differences, such as personality traits. For example, belief in a just world has been explored in relation to authoritarianism (Rubin & Peplau, 1973), conservatism (Wagstaff & Quirk, 1983), internal locus of control (Suckerman& Gerbasi, 1977), religious beliefs (Zweigenhaft, Phillips, adams, Morse &

Horan, 1985) and work ethic (Smith & Green, 1984). A great deal of emphasis has also been placed on demographic correlates of belief in a just world, particularly that of gender differences. A number of studies and meta-analytic reviews have been conducted in an attempt to explore whether men and women differ in the extent of their belief in a just world (O'Connor & Morrison, 1996). Results have been largely inconsistent.

Despite ~~this~~ the controversies, most particularly in relation to ~~y about~~ the value bases for distribution, ~~-~~that equity theory gave rise to, it was not related questions that dictated the next dominant line of enquiry. Rather this emerged from concerns about what theorists argued was the solely distributive focus of these justice theories. Equity theory was criticised for having an over-emphasis on the outcomes that people receive (Leventhal, 1976, Folger & Cropanzano, 2001) and its neglect of the impact that procedures have on how people make justice judgements (Thibaut & Walker, 1975, Cropanzano, Byrne, Bobocel & Rupp, 2001). Theorists thus began hypothesising about and researching the role that decision-making procedures have on experiences and perceptions of justice. These theories and research became known as procedural justice theories, and in this way defined equity theory as a distributive justice theory. It is in this way that what eventually became the tripartite justice model, discussed earlier in this chapter, began to emerge. While the distributive justice dimension of the psychological model of justice remained heavily indebted to, and shaped by, equity theory, researchers attention became largely focussed on questions about procedures and their relationship to perceptions of justice. It is the theories and research that emerged from this focus that will be discussed in the next section.

Procedural Justice

While social psychologists where challenging what they saw to be an overly distributive focus on questions about justice, a similar process was emerging within the field of philosophy where concerns about the procedures underpinning distributions were being raised. One of the most notable challenges to the distributive focus of justice in this arena came from Nozick (1974) whose procedural justice theory emerged in response to what he viewed as the shortfalls of Rawls' (1971) theory. His criticisms emerge from the belief that the principles of liberty and equality (which are, as described above the two fundamental principles of Rawls' (1971) theory) are incompatible – he argues that any attempt to maintain an equal distribution of goods will interfere with people's liberty. This argument is based on two sets of distinctions that Nozick (1974) makes regarding theories of justice.

Firstly, Nozick (1974) distinguishes between what he terms 'end-state' (or 'current time-slice') principles and 'historical' principles of justice. End-state principles presuppose that you can judge the justice of a situation based on its current structure, and adopt the view that "all that needs to be looked at is who ends up with what" (Nozick, 1974, p. 67). Historical principles place emphasis on the way in which past patterns of distribution have resulted in the current distribution, and would assert that a distribution is just depending on how it came about. For example one might look at the education and salary structure in an organisation where the more educated, highly skilled (and as such valued) positions are more highly paid. Based on the description of the distribution, as well as a particular conception of justice, you may judge this distribution pattern to just. Such a view would be based on an end-state principle of justice. If, however, you decided that you wanted more information about how the people concerned came to acquire their education or valued skills, or how the organisation has previously distributed resources (such as training and development opportunities), you ascribe to historical principles. What if the skills or education were acquired through unjust means,

such as through the Apartheid policy of Bantu Education which, among other things, allocated a disproportionately high amount of resources to white schools? Nozick (1974) criticises most distributive justice theories (including Rawls' (1971) theory) as being end-state theories. He proposes an historical approach to justice that does not just look at the 'end state' of a person's distributive holdings, but rather refers to how people came to possess their holdings.

The second distinction that Nozick (1974) makes relates to what he terms the 'patterning' that is endorsed by most distributive justice theories. He distinguishes two types of historical theory, namely patterned and unpatterned. Patterned theories endorse the view that distributions should be made according to some kind of pattern based on the statement 'To each according to their____" (Wolff, 1996). As discussed earlier, different theories suggest different bases for the distribution of resources, such as to each according to their merit, to each according to their need, or to each according to their ability. Unpatterned theories, on the other hand, do not do this, but rather focus on the procedural aspects of distribution. In such a theory the basis of just distribution is people acquiring goods through legitimate procedures (Wolff, 1996).

Nozick (1974) asserts that almost all theories of justice are either patterned or end-state. It is these features of justice theories that present a problem with regards to the compatibility of liberty and equality. He asks us to imagine that a distribution, based on a pattern of choice, has at last been achieved. In other words shares of the resource vary according to the dimension most favoured, be it equality, merit, need or any of the other suggested dimensions. What is likely to happen from there on? Nozick (1974) argues that people will begin trading with one another, upsetting the original distribution of resources. He gives the example of a sportsman who is exceptionally popular and who signs a contract with his managers stipulating that he

receives a portion of the ticket price for himself. A large number of people enjoy watching him play sport, and they are willing to use some of their resources to do so. As such, millions of tickets are sold over the course of the season, and the sportsman accrues more wealth than people who are not good or popular sportsmen (or other marketable talents). The sportsman made his or her money through legitimate transactions that were entered into fairly, yet the distribution is no longer the same as the initial favoured distribution. In order to maintain the desired distribution, people's liberty (their freedom to use their resources as they wished) would have to be interfered with.

It is this argument that Nozick (1974) claims refutes much of Rawls (1971) theory of justice. He argues that the Difference Principle is a patterned conception of justice in that resources must be distributed in order to make the least well-off as well-off as possible. Should such a distribution be achieved, people will then use their resources as they wish, some spending, some gaining more. As such the Difference Principle will, at some point, no longer be satisfied. In order to once again satisfy this principle, resources will need to be re-distributed. This will require the interference in people's liberty. Given that Rawls (1971) prioritises the Liberty Principle over the Difference Principle, Nozick (1974) argues that if the Difference Principle does in fact interfere with the Liberty Principle, then the Difference Principle must be forfeited. As such, Nozick (1974) argues that liberty upsets patterns. In fact he states that " …no end-state principle or distributional patterned principle of justice can be continuously realised without continuous interference with people's lives" (Nozick, 1974, p. 73). Nozick (1974) attempts to provide an alternative theory of justice that accounts for these criticisms, which he terms a Historical Entitlement theory of Justice. He does not present a fully developed version of this theory, but rather attempts to account for the general features of this theory.

Nozick (1974) begins his account by arguing that the term ‘distributive justice’ is not neutral as it implies some form of centralised body whose function it is to dole out a supply of things. Theories of social justice presuppose that a society’s resources and wealth can be likened to a cake, and questions about justice pertain to how the cake can best be divided up (Simmonds, 2002). According to Simmonds (2002), within this paradigm, equal distribution of the cake has the most supporters, with distribution on the basis of need being the second most popular view (It is not clear what evidence there is to support this notion). Other arguments might focus on how the distribution of the cake will effect the size of the cake in the future, or counter to this, how such concerns cannot be a consideration for distribution of the cake now (Simmonds, 2002). Equity theory argues that people will favour the cake being divided up on the basis of what individuals contributed to the making of the cake. This paradigm, Nozick (1974) argues, is faulty for a number of reasons. Firstly it does not account for the idea of redistribution – where error was present in the initial distribution, and needs to be corrected. Secondly he argues that there is no such thing as a central distribution, no one individual or group who has the right to control all resources. Instead, a free society will comprise different people controlling different resources. He states that the total result of distributions in a society is in fact the product of numerous individual decisions, decisions that these individuals are entitled to make. As such his focus is on the ‘holdings’ people possess, and how they came to have them. As such he terms his specific focus that of ‘justice in holdings’ (Nozick, 1974).

The subject of justice in holdings consists of three topics. The first is the ‘original acquisition of holdings’, which focuses on the ways in which unheld resources come to be appropriated. Principles or rules emerging from concerns related to this topic are referred to as ‘principles of justice in acquisition’. Secondly there is the topic of ‘the transfer of holdings’, which is

concerned with the ways in which holdings get passed from one person to another. Principles governing such matters are referred to as 'the principle of justice in transfer'. The final topic is that of 'the rectification of injustice in holdings'. This topic focuses on past injustices that have shaped current holdings, and is concerned with notions of rectification (Nozick, 1974).

Nozick (1974) argues that the subject of justice could be accounted for on the basis of the acquisition and transfer of holdings, in the following way: Firstly, a person who appropriates a holding in accordance with the principle of justice in acquisition is entitled to that holding. Secondly, a person who acquires a holding in accordance with the principle of justice in transfer, from someone else entitled to the holding, is entitled to the holding. And finally, no one is entitled to a holding except by (repeated) applications of 1 and 2. (1974, p. 69). Nozick (1974) views the principle of distributive justice to be one where everyone is entitled to the holdings they have under the distribution. A just distribution is one that arises from another just distribution that is based on legitimate means. 'Legitimate means' are defined in relation to the principles of transfer and acquisition – i.e. what he terms the legitimate 'first moves' (how an unheld holding initially came to be held) must be done in accordance with the principles of justice in acquisition. Further, to transfer holdings legitimately from one individual to another means doing so in accordance with the principles of legitimate transfer. In this way, Nozick's (1974) theory of justice in holdings is historical as it does not only look at the end-state distribution, but rather the legitimacy of how holdings have come to be possessed.

Nozick (1974) describes a number of illegitimate means of acquiring or transferring holdings: theft, fraud, slavery, and forcible exclusion. It is such past injustices that demand the existence of the third topic of justice in holdings, that of the rectification of past injustices. This topic

would derive principles of justice based on questions such as what should be done, if anything, to rectify past injustices; what obligations do benefactors of past injustice have to those whose situations were worsened by the injustice; if one attempts to rectify past injustices, how far back need one go in order to erase past injustices; and what can victims of past injustice rightfully do in order to rectify the injustice? Nozick (1974) acknowledges that it is very difficult to devise a thorough treatment for such questions, and as such a principle of rectification. He argues that should this, in an ideal state, be possible, such a principle would use historical information to determine where holdings were acquired or transferred illegitimately, to trace events that followed from these injustices and would provide a description of the current state. Nozick (1974) presumes that the principle of rectification would then make use of this information to predict what would have occurred if the injustice had not been perpetrated. As such Nozick argues that " the general outlines of the theory of justice in holdings are that the holdings of a person are just if he is entitled to them by the principles of justice in acquisition and transfer, or by the principle of rectification of injustice (as specified by the first two principles). If each person's holdings are just, then the total set (distribution) of holdings is just" (1974, p. 66).

It is interesting to note that while Nozick's (1974) theory attempts to move beyond a static notion of justice by incorporating ideas about procedure and historical entitlement, it still remains a theory about the distribution of goods and conditions, i.e. it addresses a procedural concern within a distributive justice paradigm. There are a number of theorists who argue that this is a severe limitation of most of theories of social justice (Young, 1990; Sen, 1999; Nussbaum, 1996). This debate will be looked at more closely in Chapter 4 when discussing demographic variables and social position in relation to experiences and perceptions of justice, as research into demographic variables can be seen as an important factor in

developing theories of justice that move beyond notions of simple distribution. Nozick (1974) does, however, introduce important concerns about the limitations of looking at distributive justice purely in relation to end-state outcomes, as the distributive theories discussed above all do. By looking at the way in which what leads up to a particular outcome decision is central to questions about the fairness of the outcome itself, Nozick's (1974) theory mirrored developments in the area of social psychological research. An important deviation of these theories, however, is that they focus on more micro processes, as opposed to Nozick (1974) who, like Rawls (1971), has broader societal processes as his focus.

As discussed earlier, equity theory was criticised for its exclusive focus on outcomes of distributions. It can be argued that equity theory, like Rawls' (1971) theory, is an end-state theory in that it does not consider historical or procedural processes when accounting for perceptions of justice. Social psychologists were alerted to the importance of procedural justice by Thibaut and Walker (1975) who conducted a series of studies within a legal setting aimed at exploring the importance of procedures in determining perceptions of fairness about outcomes. They hypothesised that the procedure followed in determining the outcome of a dispute resolution process will influence the litigant's satisfaction with the outcome of the case (Thibaut & Walker, 1975). A number of laboratory experiments were conducted in order to test this hypothesis as well as to explore further this notion of procedural justice (Thibaut & Walker, 1975). In these studies two dispute resolution processes were used – an adversary and inquisitorial procedure. The adversary procedure placed control over defining the dispute and presenting the arguments and evidence in the hands of the disputants, i.e. they had some control over the process. The inquisitorial procedure, on the other hand, gave control of the process to the judge or arbitrator. Thibaut and Walker (1975) used samples of university students, lawyers and judges in a series of experiments involving simulated

disputes aimed at determining if the type of procedure used (i.e. the adversary or inquisitorial procedures) affected 'litigants' perceptions of the 'judge's' decision. Results from these experiments indicated that use of the adversarial procedure elicited more favourable perceptions of the outcome than use of the inquisitorial procedure, irrespective of whether the litigants won their case or not.

An example of such an experiment was a study conducted by Walker, LaTour, Lind, and Thibaut (1974 in Thibaut & Walker, 1975) where university students participated in a business simulation exercise that allowed participants to benefit from cheating. At a point in the experiment a member of the team was accused of cheating and a process was set up to determine their guilt. In certain conditions the participant was made to appear guilty while in other they appeared innocent, and the outcome of the process (i.e. the determination of guilt and innocence) was unrelated to the actual innocence or guilt of the subject. Both adversarial in inquisitorial processes were used, and participants' satisfaction with the range of outcomes was assessed. As hypothesised, participants were more satisfied with the verdict, regardless of the guilt or innocence of the subject, when the adversarial procedure was used rather than the inquisitorial procedure. A second experiment (Thibaut, Friedland, & Walker, 1974) aimed to investigate whether subjects would be more likely to adhere to rules that they had participated in making. This study, also involving a business simulation involving 96 undergraduate students, showed that participants observed rules more closely in what was termed the correspondent rule condition – where students had the opportunity to participate in the rule making – than in the non-correspondent condition – where they were unable to participate in the rule-making process.

Thibaut and Walker (1975) thus proposed a psychological model that looked at procedural justice preferences, where it is issues of control distribution between participants and the third party that are central to perceptions of fair processes (Tyler, 1989). They distinguish between two types of control that occur at two stages in any given procedure, namely process control and decision control. Process control refers to the individuals control over the presentation of facts, information and evidence, while decision control refers to the participants control over the actual decision made (Houlden, LaTour, Walker, & Thibaut, 1978). They state that dispute-resolution procedures can be classified according to process and decision control, and that these factors may be a key determinant of preference for procedures (Houlden et al, 1978). Adversarial procedures are preferred because they allow litigants to retain more process control than inquisitorial procedures. A demonstration of these hypotheses was provided in an experiment involving 82 law students and undergraduates. Participants were placed in a situation where they were expected to take on the role of a third-party or a litigant, and where four dispute resolution procedures were used – each one varying in the extent to which the third-party had control over the presentation of evidence (i.e. process control) and over the final decision (i.e. decision control). Results indicated that both the litigants and the third parties preferred high third-party decision control. Further, results indicated that process control was viewed as more important than decision control, and that process control is important even if it is not linked to decision control (Houlden et al, 1978). This experiment also demonstrated the importance of procedural justice as it indicated that injustice is most likely to be perceived to have occurred if an individual perceives a lack of process control (Randall and Mueller, 1995).

Another experiment using 283 graduate students aimed to explore whether process control yielded more favourable perceptions of outcomes than the absence of process control.

Results indicated that regardless of whether the participants assumed the role of accuser or accused those who exercised process control evaluated all aspects of the trial more positively than those who did not have process control (Musante, Gilbert & Thibaut, 1983). A critical element of Thibaut and Walker's (1975) procedural justice theory is, therefore, that the perceived fairness of the procedure will result in satisfaction with the outcome itself, regardless of whether the outcome is positive or not (Barrett-Howard and Tyler, 1986). Many theorists have noted the relationship between procedural and distributive justice (Randall and Mueller, 1995; Cropanzano & Greenberg, 1997). Folger (1977) refers to a mutual influence or co-determination, where perceptions of the procedures used will impact on the perceptions of the outcome itself, and vice-versa.

While Thibaut and Walker (1975) relied on experimental enquiries to provide evidence for their theories, a number of studies conducted in the field and using correlational designs were conducted in order to enhance the robustness of the evidence. For example Tyler (1984) conducted research using actual litigants in a misdemeanour court in America. He interviewed the participants, asking them about their experiences in the courtroom, their perceptions of the case, the outcome of the case, their perceptions about the fairness of the verdict as well as the procedures used to try their case. Tyler (1984) found that judgements of procedural and distributive justice were distinct from one another, and he argued that this implied that justice perceptions were not simply linked to the favourability of outcomes. Using a regression analysis, Tyler (1984) found that perceptions of fairness accounted for more of the variance in the dependent variables than did outcome favourability (Tyler, 1984). Moving to a different field setting, Alexander and Ruderman (1987) conducted research using 2800 American federal employees. Participant's judgements about their work environment, including those about perceptions of decision-making fairness, were used to

predict job satisfaction and intention to turnover. Results indicated that both job satisfaction and turnover intention were influenced by perceptions of procedural justice. According to Tyler and Lind (1991) a range of similar correlational studies in natural field settings provide support for the procedural justice hypothesis.

In trying to explore why process control was emerging as so central to perceptions of fairness, researchers started focussing on what was termed the value-expressive function of speech. It was argued that the opportunity to 'tell one's side of the story', i.e. the opportunity to speak, might, in many instances, be an important part of speech other than just its utility to secure other outcomes (Tyler & Lind, 1991). Folger (1977) thus identified two further characteristics of procedures that enhance or decrease an individual's sense of participation in procedures and outcomes, namely those of voice or mute procedures. Voice procedures are those that allow the individual to contribute to the decision-making, and mute procedures are those that deny people that opportunity.

Folger (1977) conducted an experiment in order to explore the impact of voice on perceived inequity. Eighty sixth-grade boys assumed the role of worker and were given a card-sorting task for ten work periods. A manager, unknown to the participants to be part of the experiment, decided after each work period how a monetary reward would be divided between himself and the participant. The way in which this reward was divided was varied between two conditions (equal pay or unequal pay favouring the manager). Participants were then either given an opportunity to voice their opinion or they were not. In certain cases the manager changed the allocation after hearing the participants opinion of the allocation decision, while in other cases the decision remained unchanged. Regarding distributive justice perceptions, results indicated that among participants who

received the same reward, those who had voice perceived the outcome to be fairer than those who had no voice. In relation to procedural justice perceptions, participants with voice were more satisfied with the allocation process than participants in the mute condition.

While Folger (1977) did alert researchers to the potential importance of voice in procedural justice perceptions, this experiment raises a number of concerns. Similar to the concerns raised about other experiments described in this chapter, this study used a sample of students who were asked to pretend to be employers, something they were ill equipped to do having presumably never been in any kind of employment (considering their age). The importance or the value that the money that eleven or twelve year old boys earn from participating in a game at school cannot be likened to that of a self-sufficient person working in order to support themselves, and possibly a family. Within the real context of an organisation, it can be argued that considerably more emotion, anxiety and concern is invested in reward allocation processes than can be experienced by school children. As such the results of such an experiment might not be reflective of what would actually happen in a real world setting. Employees might not care as much about procedures, being heavily invested in outcomes, or might be even more heavily invested in the procedures given the significance of the outcome. Despite the problems with this experiment, it was considered to be seminal study that laid the foundation for further investigation into the importance of procedures for justice judgements.

While process and decision control as well as voice were all considered important aspects of procedures, Leventhal (1980) argued these were only a few of the characteristics of procedures that could potentially impact on perceptions of fairness. He developed a theory

relating to the characteristics of procedures used in order to make allocation decisions, where he proposed six criteria that could be used to evaluate the fairness of allocation procedures (Leventhal, 1980). These six criteria include consistency (the application of rules equally to all concerned over time), bias suppression (the prevention of self-interest in the allocation process), accuracy (the basing of decisions on accurate information), correctability (the modifiability of decisions where appropriate), representativeness (the representation of all parties concerned in the process), ethicality (the reflection of current ethical and moral principles in the process). As can be seen this is a much broader model than Thibaut and Walker's (1975) model which only accounts for the control aspect of procedures or Folger (1977) who focuses on the role of voice in procedural justice judgements. Despite this, Leventhal's (1980) has not received much attention from researchers and thus remains largely unsupported by empirical evidence (Tyler & Lind, 1991).

Thibaut and Walker's (1975) procedural justice hypothesis is viewed as a pioneering theory within the social psychological study of justice (Tyler and Lind, 1991) and a retrospective analysis of the research trajectory in this area allows us to see how, through their work, procedural justice emerged as distinct from distributive justice as an area of research and analysis. While there does appear to be considerable evidence to support the hypothesis that these two dimensions of justice are distinct from one another and have separate effects, it is important to look more carefully at the implications this has for a model of justice perceptions. Thibaut and Walker's (1975) hypothesis was an *a priori* one - they suspected that procedural issues were important in the assessment of justice perceptions, and thus set out to explore the validity of these suspicions. Upon asking people about their experiences of procedures, and through experiments that manipulate different aspects of procedures, they ascertained that procedures were important to people when assessing the fairness of

outcomes. Further research supported these findings. While this has obvious value in contributing to our understanding of justice perceptions, it might be presumptuous to assume that this constitutes a model of justice perceptions as research does not indicate that people might naturally distinguish between procedural and distributive justice concerns, nor does it explore what other dimensions of justice might be important to people. Procedural justice perceptions emerge as central because, to some extent, researchers centred questions about procedures – by asking people about procedures and their importance we can gain insight into the importance procedures have for them, not into what factors account for their perceptions of justice. Despite this there was an almost exclusive focus on theories about and research into procedural justice until the mid eighties, when questions about why people care about procedural justice led to the emergence of the third dimension in the tripartite justice model – that of interpersonal justice.

Interpersonal Justice

There is little clear agreement over the definition of interpersonal justice. Some authors refer to it as the manner in which outcomes are communicated to individuals on an interpersonal level (Greenberg, 1987), while other writers define it to be about the perceived fairness of the treatment received and the symbolic and intangible outcomes of procedures (for example respect) (Folger and Konovsky, 1989). Further to this, some authors identify interpersonal justice as the social (rather than structural) aspect of procedural justice, while others refer to it as a separate justice dimension (Cropanzano & Greenberg, 1997). The dimensionality of the justice model has been the source of extensive debate, and this will be discussed further on in this chapter. What is central to most discussions about interpersonal justice is that it refers to the quality of treatment an individual believes he or she has received from decision

makers, and the extent to which they feel that the formal decision making procedures are properly enacted (Leung, Chiu and Au, 1993).

Bies (1987, 1989) was one of the first researchers to refer to interpersonal justice perceptions and to treat it as a separate justice dimension. He argued that procedural justice researchers such as Thibaut and Walker (1975) and Folger (1977) had focussed exclusively on structural concerns related to procedures, but had neglected the social importance that procedures had for people. He further argued that other theorists, such as Leventhal (1980) had conflated structural and social procedural concerns. He proposed that rather than just procedures and outcomes, there were in fact three aspects of justice that people distinguished between – that of procedures, interactions, and outcomes – and that each of these three dimensions were assessed or judged separately by people (Bies, 1987). As such he argued that interpersonal justice should be researched independently of distributive and procedural justice.

On the basis of initial research conducted by Bies and Moag (1986 in Cropanzano et al, 2001) interpersonal justice was defined and operationalised as comprising two aspects, namely the interpersonal treatment received from decision-makers (such as respect, courtesy and friendliness), and the use of adequate explanations and causal accounts for the outcome (informational justice). The importance of socially sensitive treatment for people and their perceptions of justice has been well researched and documented. A study conducted by Messick, Bloom, Boldizar, and Samuelson (1985) asked people to list perceived unfair behaviours that had been enacted towards them by others. The majority of behaviours reported focussed on issues such as being treated politely or with consideration, rather than a on distributive concerns. A similar study conducted by Mikula, Petri, and Tanzer (1990) involved the categorisation of 280 descriptions of unjust

events collected from various student samples in Austria, Bulgaria, Finland, and West Germany, using different methodologies. They found that a considerable portion of the events that were reported by participants referred to the manner in which people felt they were treated in interpersonal interactions with others. It is interesting to note that the sample was one comprised of university students, which again raises some of the concerns mentioned throughout this chapter.

The impact of interpersonal justice perceptions has also been explored. A study conducted by Skarlicki and Folger (1997) aimed to explore whether employees propensity to take part in organisational retaliatory behaviour were related to, among other things, perceptions of interpersonal justice (defined as the respect and dignity shown by the employee's supervisors). Results indicated that when supervisors showed adequate sensitivity and concern toward employees, as well as being respectful, displeased employees were more accepting of the unfair situation and less likely to engage in retaliatory behaviour. Greenberg (1994) explored the relationship between socially fair treatment and the acceptance of a smoking ban within an organisation. One of the hypotheses considers whether the degree of acceptance of a smoking ban will be determined by the degree of social sensitivity (interpersonal justice) shown in the communication and enforcement of the ban. Findings showed that the higher the degree of social sensitivity the more people were accepting of the smoking ban (Greenberg, 1994).

The group-value model developed by Lind and Tyler (1988) can be understood to be a theory pertaining to socially sensitive treatment. While it was originally developed, and is often presented, as a theory that attempts to account for why people cared about procedural justice,

in doing so it focussed on the social importance of procedures. Shapiro (2001) argues that the group value model should not be seen as distinct from interpersonal justice theory. This model identifies three elements that become of value to people when making justice judgements, due to the value placed on social group membership, namely trust, standing and neutrality. Trust pertains to the perceived intentions of the third parties, and involves the belief that they desire to treat people in a fair and benevolent manner (Tyler, 1989). The intentions of the third party are particularly important as current interactions allow the individual to make assumptions of how things will be in the future. Standing refers to the individuals concern with their status in the group. If they are treated rudely, they are aware that the authority they are dealing with views them as having low standing within the group. However, if respect is shown for people's rights as group members, they know that their rights will be respected. (Tyler, 1989). Neutrality refers to the extent to which an individual believes decision-makers are neutral and free from bias with regards to such decision-making. Individuals value neutrality as it is an indication that their interests will not be disregarded and enhances the belief that they may benefit fairly from membership of the organisation (Tyler, 1989).

A study conducted by Tyler (1989) aimed to test the group-value model as an explanation for the perceived importance of procedural justice perceptions. This study was specifically aimed at testing non-control issues, as had been done by procedural justice researchers such as Thibaut and Walker (1975). The sample comprised 652 residents of Chicago who were interviewed telephonically after they had had an experience with the legal authorities such as an appearance in court, a call to the police for assistance, or being stopped by the police. Outcome favourability, the independent variable, was assessed in what Tyler (1989) referred to as both absolute and relative terms. In order to assess the absolute favourability of the

outcome respondents were asked about the actual outcome of the experience, such as receiving a traffic ticket, being arrested or winning a court case. Answers were then rated accordingly. With regards to the relative favourability of the outcome, this was assessed in relation to four standards, that of control (assessed with one item for process control and one item for decision control), neutrality (assessed by measuring lack of bias with three items, behaviour with two items and factual decision making with two items), trust (assessed using a scale), and standing assessing with two items). There were four dependent variables, namely procedural justice perceptions (measured with a two item scale that was subsequently averaged into a single index), distributive justice (measured using two items that were subsequently averaged into a single index), affect towards authorities (measured using a three item scale that was subsequently averaged into a single index), and overall fairness of authorities in general (measured using three items that were subsequently averaged into a single index). A multiple regression was done the results of which indicate that neutrality, trust and standing consistently explain a significant amount of variance in absolute and relative outcome favourability. With regards to procedural justice perceptions, neutrality, trust and standing account for 65% of the variance when considered alone ($p<0.001$), whereas control issues account for only 39% of such variance when considered alone ($p<0.001$). Tyler (1989) argued that this study indicated that relationships with third parties are important to people, and they are affected by evidence about, among other things, the interpersonal dynamics of their interactions.

This study, the first direct test of the group-value model, was an important contribution to the debate about social aspects of procedural justice concerns. Rather than using an experimental paradigm or a student sample, this study used a large and diverse sample of people who reflected on real life incidents that they themselves had experienced. The methodology,

however, presented one particular concern which, it will be argued further in this chapter and in Chapter 3, has been echoed in a large number of psychological studies of justice: the variables under consideration are reduced to one or two questions that are taken to represent the whole of that construct. As can be seen from discussions in this chapter, justice is a very complex variable that has many different facets and dimensions. Despite this, in this study different aspects of justice were measured using only one or two questions. Very often the questions in sub scales were so similar they were averaged and used as only one index. This is perhaps an indication that the questions needed to be designed in order to have more ability to discriminate between different aspects of the constructs. It seems that perhaps questions about how we define perceptions of justice were deprioritised in deference to the exploration of the relationships between variables.

Despite these concerns, this study, as well as a number of others (Tyler, Degoey, & Smith, 1996, Tyler & Degoey, 1995; Huo, Smith, Tyler & Lind, 1996) have given a clear indication that people are concerned with the manner in which they are treated by people in authority. These types of findings were echoed in the second aspect of interpersonal justice that was focussed on by researchers, that of informational justice.

Informational justice has been defined as the adequacy of the information used to explain how decisions are made and the thoroughness of the accounts provided (Greenberg, 1994). Initially this aspect of interpersonal justice was defined purely in relation to the notion of justification – whether or not the decision-maker provided a justification for the distribution decision (Bies, 1987). Early research in this area thus focussed on the role and importance of justification as well as investigating whether its effects were independent of those more structural concerns researched by Thibaut and Walker (1975) and Folger (1977). For

example, in a laboratory study using a sample 96 graduate students in a business school, Bies and Shapiro (1988) found that the type of procedure used (voice versus mute procedures) and justification by the decision-maker for outcomes (the absence or presence of a justification) had independent effects on perceptions of procedural justice. They then conducted a second study in order to determine whether the findings emerging from the laboratory study would replicate themselves within a field setting (Bies and Shapiro, 1988). In this second study they used a sample of 78 M.B.A. students who were currently employed and had two years of work experience as well as 24 people employed in a range of industries. Participants were asked to recount a time when they had asked for more resources from their boss but the boss did not satisfy the resource demand. The three variables (procedural justice, voice and justification) were then measured using 7-point Likert scales. A multiple regression analysis was used in order to determine the relative influence of voice and justification on procedural justice judgements. Results indicated that both the type of procedure and the justification had a significant influence of procedural justice judgements (Bies and Shapiro, 1988).

While the field study does seem to replicate the laboratory results, there are a number of methodological concerns that need to be noted. The samples used in both studies seem to be very similar in nature. While the field study sample does comprise people who are employed, for the most part these people were also business students. This raises concerns about the generalisability of the results to a more diverse working population, as M.B.A. students represent a very particular group of employees – most obviously they are likely to be, or are on their way to being, part of a management group. Further, the method of asking participants to recount an incident could present some problems. The accounts might not be comparable between participants – different organisations might have very different procedures related to resource allocation (some more rigidly defined then others), different

bosses might have different levels of influence, and some organisations might have resource constraints that others don't - all of which might influence perceptions of the event. In addition to this the type of procedure (i.e. whether it was a voice or mute procedure) was measured using one item - whether or not the subject felt they were given adequate opportunity to persuade their boss by representing their position. This item could be considered insufficient to measure this variable. Firstly it conflates two separate questions – whether they were given the opportunity to represent their position, and whether their boss was open to persuasion. In addition to this a voice procedure cannot simply be defined by whether or not the opportunity to represent oneself was given. Other questions such as in what way were you given voice (a direct audience, a written submission), the extent to which you felt heard, and who were you representing your position to (perhaps your boss has no influence over the decision) are just some examples of other factors that define the type of procedure involved. Further to this justification was also measured using only one item – the extent to which their boss provided a justification that the circumstances were beyond his/her control. As pointed out by the authors themselves (Bies and Shapiro, 1988) there are a number of types of justifications that can be used and this warrants further investigation. However in addition to this, even if they were only exploring one type of justification, this perhaps needed to be measured in more detail. For example how persuasive the argument seemed, the sincerity of the account and a range of other factors might be very important in defining a justification. . Finally, procedural justice perceptions were also measured using only one item (initially there were two items but these were summed as they had a correlation of r=.92) – the extent to which the decision making procedure was fair or unfair. This might, to some extent have been appropriate in order to avoid the problem of multicollinearity, but perhaps a measure that accounts for more complexity would have been appropriate.

Despite these concerns, these studies, and others very similar to them (Bies, 1989, Bies and Shapiro, 1987) were very influential both in relation to the exploration of aspects of interpersonal justice as well as the debate about the independence of interpersonal justice from distributive justice perceptions. However research in this area did expand in an attempt to develop a more sophisticated account of justifications. For example Shapiro (1991) conducted a laboratory study that assessed the perceived adequacy of three different types of causal accounts – those that used an external attribution, those using an internal attribution with an altruistic motive, and those using an internal attribution with a selfish motive. Results of this study indicated that external attributions were considered the most effective, with selfish attributions being the least effective. The medium through which the justification was given was also researched in a study that compared the perceived adequacy of face-to-face verbal accounts and those done in writing, with results indicating that verbal communication was more effective at mitigating the negative effects of undesirable decisions (Shapiro, Buttner, and Barry, 1994). The conditions under which particular justifications are more effective were explored by Brockner, De Witt, Grover, & Reed (1990) on a sample of retrenchment survivors. They found that uncertainty about managerial procedures as well as the perceived importance of the event created a high need for information and social accounts (Brockner et al, 1990). In general, research seems to support the notion that perceptions of fairness are enhanced by accounts that provide information regarding the underlying reasons for the way in which outcomes are allocated (Cropanzano and Greenberg, 1997)

Despite a body of research that seems to indicate the importance of interpersonal justice perceptions, this area remains relatively neglected by justice researchers. This is perhaps due

to the controversy about the status of interpersonal justice in relation to procedural justice and the justice model as a whole. In a review article, Cropanzano and colleagues' (2001) treatment of interpersonal justice was restricted to a discussion of the dimensionality of justice perceptions or, as they termed it 'the structure of justice'. From this article it is clear that a considerable amount of debate has ensued and research been conducted in order to determine the factor structure of justice perceptions, with special reference to the location of interpersonal justice perceptions (Lind & Tyler, 1988; Tyler & Bies, 1990, Bies 2001; Cropanzano & Greenberg, 1997; Greenberg, 1990; Colquitt, 2001, Beugre & Baron, 2001). This has included three meta-analytic reviews (Bartle & Hayes, 1999; Cohen-Charesh & Spector, 2000; Colquitt, Conlon, Wesson, Porter & Ng, 2001) which have called for the separation of interpersonal justice from procedural justice concerns (Cropanzano et al, 2001).

This debate has perhaps been most useful in alerting researchers to the recent overemphasis on the structure of justice. In response to the review article by Cropanzano and colleagues (2001) Lind (2001) questions the value in drawing distinctions between types of justice perceptions. He argues that people can distinguish between different types of justice when responding to questionnaire items measuring different types of justice, but that the real impact of justice judgements depends on a more holistic or overall perception. He states "It seems to me…that justice researchers have put to much effort into the delineation and differentiation of various types of justice judgements and that we have ignored some common themes and close relations that exist across types of justice judgements" (Lind, 2001, p. 221). In a similar vein Greenberg (2001) argues that while he does not contest any of the research described by Cropanzano and colleagues (2001) outlining this debate, he does wonder "Does it really matter?" (Greenberg, 2001, p. 211). He too argues that people forming perceptions of justice are more likely to be making holistic judgements in response to information that is salient and

available, rather than distinguishing between different types of justice dimensions. Similarly, Shapiro (2001) argues that people in the midst of an unjust or traumatic event are highly unlikely to naturally differentiate between types of justice, and that such thinking reflects the priorities of the researchers rather than the victims of injustice.

These arguments raise concerns not only about the place of interpersonal justice perceptions, but the whole tripartite model of justice that has dominated social psychological enquiries into justice. This is an important point of departure for the current study as will be discussed in the conclusion.

Concluding Remarks

From the discussion in this chapter it can be seen that the tripartite model that social psychologists use as a framework for understanding and researching justice perceptions has evolved over a period of time, starting with equity theory and distributive justice, and ending with the emergence of interpersonal justice concerns. This model, which differentiates between three aspects of justice, has been useful particularly when exploring decisions that have emerged from clear procedures. A verdict that arises from a court case, a salary increase based on a performance appraisal, a disciplinary hearing that has a dismissal as its outcome, a job offered after a selection procedure – these are all examples of distributions of goods or conditions that were made by a clearly identifiable authority with power over a centralised resource and which emerged from an identifiable and observable procedure. It is clear to see how in such cases, where procedures and outcomes are distinct from one another, and where the procedure exists as a formal, observable means of reaching an outcome, the use of different dimensions of justice can be a valuable way of exploring and researching perceptions.

There are, however, many phenomena to which people are exposed, with respect to which there is no access to, or desire for, procedural or interpersonal information. An individual may hold justice perceptions of a particular organisational policy without knowing or caring about the procedure that was followed to create the policy. In organisations where communication, decision-making, and the dissemination of information is controlled through hierarchy and structure, it cannot be taken as given that all employees have the same kind of awareness or detail with regards to information underpinning procedures and outcomes. This is perhaps particularly true in South Africa, where past practices under Apartheid have served to create and maintain a workforce that is alienated from management and organisational decision-making structures, and where communication has historically been used as a means of political oppression or rebellion, not as a means of conveying information. While this has been taken into account theoretically (quality of communication and information sharing is recognised as an important element of interpersonal justice perceptions) there is no recognition in the measurement of justice perceptions that people may not be able to, or wouldn't naturally, make distinctions between these three dimensions.

There are also certain outcome decisions that do not lend themselves to a neat dissection into procedural, interpersonal, and distributive concerns. A criminal act, a fight with a friend, somebody contracting a serious illness, are all outcomes that do not necessarily emerge from any identifiable procedure. In such cases, decision-making procedures are not necessarily easy to locate in temporal space as they are not always bounded by a clear beginning or end. In addition to this procedures are put in place at one point in time to redress inequalities that happened in the past (e.g. affirmative action). In exploring justice perceptions in cases such as these, questions referring to procedures or interpersonal behaviours would not always add

any value to our understanding of those perceptions. Where the extraction of information about justice perceptions would be facilitated by an *a priori* categorisation of these perceptions, the use of these three dimensions might be valuable. However, imposing this when there is no need to do so might serve to force justice perceptions into the tripartite theoretical framework.

While the link between distributive and procedural justice is widely discussed and well researched, account also needs to be taken of situations in which perceptions of procedural justice may not be related to perceptions of distributive justice. The death penalty provides a clear example of this. Opponents of capital punishment will never perceive the death penalty to be a just decision, regardless of the integrity of the procedure used to make such a decision. In such cases a fair trial (i.e. one that embodies all the criteria of a just procedure) may be acknowledged, but the outcome emerging from the procedure will, never the less, be perceived to be unjust. In such cases little emphasis is placed on the procedure as people may not be willing to accept the outcome under any circumstances. There are many such examples of this at broad political levels (e.g. terrorism or war) and within smaller systems of functioning (e.g. corporal punishment in schools), as well as in organisations. Employees may not accept performance appraisals being linked to pay, regardless of how fair the assessment procedure is, or may not regard a particular offence as being worthy of dismissal (e.g. sexual harassment) despite a fair hearing.

Again, this may be particularly pertinent within the South African context, which is characterised by a strongly unionised workforce and a highly adversarial labour relationship. Given the high levels of commitment to the ideology of collectivism, strong feelings about the appropriateness of certain distributions are widely shared among employees. As such, while

correct procedures may be in place to make allocation decisions, workers are opposed to a range of possible outcomes or sanctions. South African unions are, for example, very outspoken about their opposition to employee incentive schemes, regardless of the procedures used to implement them or the way in which incentive money is distributed among staff. At the heart of this divergence of views is the ideological basis for making distributive decisions. Management and owners work on the basis of equity as an appropriate standard for distribution, while most unions advocate the notion of equality as just grounds for resource sharing. Given this fundamental difference in views, it is likely that procedural fairness perceptions may not always be linked to distributive justice perceptions.

In addition to these concerns, it is also important to note that the tripartite justice model relies, to some extent, on the notion of a centralised body of resources with a limited number of people having authority over how those resources get distributed. Once again there may be certain situations in which this may be accurate (many of these in an organisational setting), but there are also very many where such distinctions are not as clear. As pointed out earlier in this chapter, Nozick (1974) argues that there is no such thing as a central distribution where one individual or group has the right to control all resources. Instead he argues that the total result of distributions in a society is in fact the product of numerous individual decisions, decisions which these individuals are entitled to make (Nozick, 1974)**.** For example a judge who listens to a case, assesses the individual's guilt and then sentences him/her to a punishment is not making such decisions on his own – he is bound to enact the laws of that society which govern the definition of criminal wrong doing and relevant punishments, the standards of proof required to establish guilt, as well as the procedures to be used in order to run a criminal trial, which in turn are promulgated by politicians representing different interest groups who are, in turn, elected into such positions by all the enfranchised citizens of

that country. As such to assume that he is one person who is entirely responsible for a verdict or a sentence is perhaps erroneous, and as such to assess perceptions of fairness by asking people to focus on the procedure used, the verdict, and the way in which the judge behaved towards the accused, is not accounting for the complexities of the context. An investigation that accounts for interpersonal aspects of justice in isolation from broader institutional relations not only fails to account for the whole picture, but also misrepresents such interpersonal relations as being unaffected by such broader concerns

There is a concern, therefore, that this theoretical paradigm is based on a dissection of justice into three (or sometimes two) 'types', which then direct lines of questioning, and in turn generate conclusions that are, in fact, misleading – they perhaps only offer a view of part of the picture, and as such present only circumstantial evidence about perceptions of justice, from which other information is inferred (for example "The judge was perceived to be unfair" when in fact it was a whole set of institutional practices and laws that are perceived to be unjust).

Despite such concerns about the tripartite model, it forms the basis of almost all psychological research being conducted in the area of justice. All of the validated scales used to do quantitative studies in this area are based on this tripartite framework – questions are asked about distributions, procedures, and interpersonal treatment, and then are often summed in order to obtain an overall justice score, or individual sub scale scores. This raises concerns about the way in which knowledge systems are generated within this paradigm.

As discussed earlier in this chapter, the psychological approach to research and knowledge generation is primarily empirical in nature. As can be seen from this review of seminal

research, the social psychological study of justice, and indeed the existing theoretical model, emanates in particular from an experimental research paradigm. While it is argued that the study of justice deals with real world issues that are of relevance to people, and that much field research is conducted (Cropanzano, 2001), a considerable amount of research is still conducted within the experimental paradigm, often using fairly homogenous groups of students as samples. This presents two concerns. The first pertains to the limitations of the experimental paradigm (some of which have been discussed in this chapter), which observes people's reactions to situations that are removed from actual events or experiences – people are either asked to imagine scenarios, or the researcher attempts to simulate conditions. As such the researcher is defining the parameters of the 'just' or 'unjust' situation, rather than people's actual experiences. Given the self-referential nature of the psychological body of research, they are often doing this on the basis of other research conducted in similar ways, and on the basis of an a-priori theoretical framework. There is, therefore, a danger that the responses being received are confirming a particular line of thought simply because of the way in which the questions are being asked and the experiments set up. As such when research is conducted in the field, it is on the basis of a framework that directs research and responses in a particular direction.

The second concern regarding the experimental research paradigm relates to the nature of the samples upon which the research is being conducted. Many of the samples are, as mentioned previously, student samples, and are fairly homogenous with regards to demographic composition. Very little meaningful attention is paid to the limitations this presents to the research outcomes. The argument is often that ideas are tested out within the experimental setting on student samples in order to develop theoretical ideas. These ideas then need to be tested in the field. This is problematic in that it indicates that only particular types of ideas are

being tested in the field –those that emerge as interesting or significant within the experimental mode. As such what is being taken to the field are research questions based on the experimental experiences of predominantly white American or Western European university going students. While much of this may prove to be both significant and relevant in other 'real world' contexts, it is problematic to imagine that the theoretical framework emerging from this research is at all representative of the larger population's experiences.

A further concern regarding the systems of knowledge generation within the psychological paradigm is the tendency to reduce very complex issues into 'variables', which are then measured by a set of questions and taken to accurately represent the whole of that experience.

It can be argued that the psychological framework of justice described above, is reductionist, distilling two or three 'types' of justice out of a complex set of emotions, cognitive processes, and experiences, which are seen to apply to all contexts. As mentioned earlier a considerable amount of quantitative research is based on the use of justice scales that reduce measurement of justice perceptions into the three subscales. These measures then further reduce such perceptions by adding up the scores for each question in order to produce one number that then indicates a low, medium, or high score. As such not only are perceptions of justice already being limited to the three types identified by researchers, but the complexities involved within each of these dimensions as well as the differences between people are being diminished. As such the knowledge and discussions generated about perceptions of justice are simplified and limited with regards both to their usefulness and their capacity to generate ideas outside of the existing paradigm.

Clearly the two central concerns being discussed – that of the limitations of the tripartite model and the methodologies used to explore such a model – are closely linked. More systemic thinking that acknowledges the complexity of justice will demand research methodologies that extend beyond linear thinking. The recognition of complexity demands that we move away from trying to simplify or reduce variables into measurable units, but rather find methodologies that can account for and help explore this complexity. As such what questions we ask, the way in which we ask them, to whom we ask them, and what tools we use to analyse them all need to fall under close and critical scrutiny – the limitations of current methodologies need to be given far more meaningful attention, and problems with such methodologies that are in fact insurmountable need to be acknowledged. As will be seen when discussing the research questions and the methodology, it is these considerations that form a fundamental point of departure for the current study.

This chapter has focussed on the notion of social justice, with particular emphasis on the social-psychological approach to the topic. However within psychology a second area of study has emerged – one that focuses on the workplace and the way in which justice concerns manifest themselves within that context. Through these efforts organisational justice has been defined, by theorists working in that area, as a field of study independent of the social psychological study of justice (Cropanzano, 2001). In the next chapter this assertion will be explored along with the nature of organisational justice and its relationship to the body of knowledge and research discussed in this chapter.

Chapter 3: Organisational Justice

Overview

As discussed in the introduction, this study explores two aspects of justice – that of social and organisational justice. Considered to be the more encompassing of the two, social justice was discussed in Chapter 2. This chapter will thus focus on organisational justice, with two key aims in mind. The first, which is similar to the aims set out in Chapter 2, it is to provide an overview of the research trajectory of organisational justice in order to provide a point of departure for the current study. As stated in the introduction, organisational justice perceptions are being explored in relation to demographic variables and thus an understanding of this construct is essential. The second aim, to be discussed in more detail at the end of this section, relates to providing a critical review of the methodological underpinnings of the research done in this area, once again in order to assist with a point of departure for the current study.

Vermunt & Steensma (1991) state that psychologists are interested in justice at an individual and at a group or organisational level. At an individual level the focus is on the way individuals acquire a sense of justice, how cognitive processes work in relation to making justice judgements, and what the reactions to perceived injustice is. At a group level the focus is on the distribution of resources within the context of a need for co-operation and competition, as well as the influence of group relations on the development of justice principles and the interplay between group and individual reactions to perceived injustice. At a broader societal level, the focus is on people's perceptions of the distribution of rewards, income and social security.

As discussed in Chapter 2, in the 1960s, 70s and 80s much of the psychological research into justice was located broadly in the area of social psychology, and focused most primarily on individual perceptions of justice and the interplay between group and individual experiences of justice. However an overwhelming amount of the current literature and exploration is now focussed on the ways in which justice concerns manifest within the workplace. As such the field of 'organisational justice' – which concerns itself with the ways in which employees determine whether they have been fairly treated in their jobs, and the way in which perceptions of justice impact on other work related variables (Cropanzano and Greenberg, 1997) - has developed into a domain of research and application that accounts for a large proportion of work being done on interpersonal aspects of justice in the discipline of psychology.

Why has the study of justice emerged so dominantly in this sub-field? Most obviously there are many characteristics of the workplace that make issues about justice a key concern, and that make the workplace an almost ideal setting for the empirical study of justice. Firstly, justice concerns are formalised in workplace settings through organisational policy and procedures. For example, people are graded in relation to a given set of criteria and are paid a salary and accorded status in relation to those gradings. In addition, behaviour is strictly governed by a clear set of standards that are based in the legal framework of broader society and that are central to organisational functioning and effectiveness. An additional characteristic of workplace settings is the idea that due to the profit-making motive of the organisation, the distribution of resources has to be limited. The success of such organisations lies in its management's ability to limit expenditure (e.g. salaries, benefits) while maximising income (e.g. through increased productivity). As such the distribution of resources within such settings has very immediate importance. Finally, there are domains that are unique to

workplace settings, such as wage negotiation, conflict resolution, labour disputes, and union-management agreements, where concerns about justice are easily observable. It is argued that these and many other characteristics make organisations a "rich venue" for studying justice (Cropanzano & Greenberg, 1997).

While organisational justice researchers acknowledge their roots in social psychology, and grant that concerns about justice are not unique to organisations - and that much of organisational justice researchers' understanding of justice is based on other settings and contexts (Cropanzano & Greenberg, 1997) - they assert that this area has developed an identity that is now independent of these origins (Cropanzano, 2001). Despite this assertion, it is not always clear on what basis such a distinction is made as organisational justice researchers ascribe to the same body of theory and research as mainstream social psychology justice researchers. This is evident when looking at the considerable number of books and articles that have been written by organisational justice researchers offering a review of literature and research in the area (Cropanzano & Greenberg, 1997; Cropanzano et al, 2001; Cropanzano, 2001; Cohen-Charash & Spector, 2000; Colquitt et al, 2001; Greenberg & Cropanzano, 2001; Greenberg, 1990). All such reviews indicate that organisational justice research is based on the tripartite theoretical model described in Chapter 2, where justice is understood in terms of distributive, procedural, and interpersonal concerns. In an article aimed at reviewing organisational justice research and articulating new concerns, Cropanzano et al (2001) state, "…organisational justice scholars have identified at least three classes of events that are evaluated in terms of justice: outcomes, processes and interpersonal interactions." (Cropanzano et al, 2001, p. 165). While it is undoubtedly clear that organisational justice researchers do operate within this tripartite framework, it is less apparent that this was a

model identified by organisational theorists – it is arguably a model that derived from social psychologists working in a range of contexts, one of them being organisations.

While in many ways this is a minor distinction it does become important when trying to conceptually distinguish organisational justice research and other types of justice research, as organisational justice researchers would have us do. Any theoretical review of the organisational justice literature draws on exactly the same content as that of the social psychological justice model – from equity theory, through to the procedural justice work of Thibaut and Walker (1975), Folger (1977) and Leventhal (1980), and the interpersonal justice work of Bies (1987) and Lind and Tyler (1988). It would thus appear that what distinguishes organisational justice research from the broader study of social justice is the context in which this theory is applied and researched. In fact Greenberg coined the term 'organisational justice' in 1987 in order to refer to theories of social and interpersonal justice that can be *applied* to the organisational context (Cropanzano & Greenberg, 1997). Despite this there is frequent reference made to organisational justice theories. It can be seen from the discussion in Chapter 2 that a fair amount of social justice theory was tested in the organisational context. The reciprocal, and somewhat symbiotic, nature of the relationship between these two areas is somewhat acknowledged by organisational justice theorists - Meara (2001) argues that all justice could, in fact, be considered to be organisational and Cropnazano and Greenberg (1997) state that, "…we have learned a great deal about organisations by studying justice and a great deal about justice by studying organisations." (Cropanzano & Greenberg, 1997, p 318). There is, however, no theoretical area that is distinct to organisational justice and a review of the area is, then, a review of the research conducted in, and application of the social psychological theories of justice to, the workplace.

As such this chapter largely focuses on organisational justice research, of which there is a considerable amount. This research is discussed in relation to four broad areas, that of antecedents of justice perceptions, outcomes of justice perceptions, the relationship between individual characteristics and perceptions of justice, and finally justice perceptions as a mediator of other workplace relationships. Given the abundance of research exploring the nature of justice in the workplace, only a small proportion of these studies is discussed in this chapter. These studies are, however, arguably representative of the types of concerns and issues explored by organisational justice researchers, as well as the methodologies employed by such researchers.

This final issue, that of the methodological underpinnings of the organisational justice research paradigm, forms the focus of the second aim of this chapter – that is to develop a critical understanding of how the research methodologies employed direct, and possibly restrict, our understanding of how justice concerns manifest and influence people in the workplace. As such the review of organisational justice research presented in this chapter is inflected with a focus on methodological concerns – how are research variables defined and measured, who comprises the samples used, how is data analysed, what research design is used? These questions are an important part of establishing the extent to which organisational justice exists as an independent variable, as well as developing an understanding of news ways in which research questions might be explored. This critical discussion thus aims to lay the foundation not only for the research questions asked in the current study, but also the methodologies used.

The chapter begins with a discussion of research aimed at exploring the antecedents of justice perceptions. This area, while theoretically important, has not received a considerable amount

of attention from organisational justice researchers, particularly beyond that which has already been discussed in Chapter 2. Two studies that were designed to ascertain what factors influence perceptions of procedural justice – specifically in relation to work related processes - are presented and then are discussed in relation to their methodological underpinnings. By far the most attention by organisational justice researchers appears to be focussed on the next area under discussion, that of reactions to perceptions of organisational justice (and injustice). A number of studies focusing on work-related outcomes of perceived injustice are presented and discussed. This is then followed by a discussion of research into the area of individual differences and perceptions of organisational justice, another area that appears to be popular among researchers. The emphasis in this section is on the role of culture on perceptions of justice, a topic that has received widespread attention from organisational justice researchers. The discussion of organisational justice research is completed with a presentation of research that has looked at justice perceptions as a moderator of other work-related relationships. The chapter is then concluded with an overview of the central points and arguments presented.

Organisational Justice: Applying Justice Theory to the Workplace.

As demonstrated in Chapter 2, social psychological justice research has been based on the theoretical notion that justice can be regarded from three different perspectives or in relation to three separate concerns, namely distributive, procedural, and interpersonal aspects. These are often referred to as 'types' of justice (Cropanzano, 2001) which are looked at either independently or in relation to one another. The division of justice into these three areas is based on an *a priori* logic that gained popular support by researchers. As discussed above the use of these three justice dimensions has become the most prevalent approach to understanding and researching organisational justice. Research in the area of organisational

justice is prolific and there seems to be a burgeoning interest in the area. Such research has focused on the antecedents of perceptions of justice, outcomes related to perceptions of justice, justice as a mediator, and individual differences in justice perceptions, all of which will be discussed in the following paragraphs.

Working on the basis of the theory described in Chapter 2, organisational justice researchers have conducted studies in order to explore the antecedents of justice perceptions in relation to specific workplace practices. For example Ming (1990) set out to extend research based on Leventhal's (1980) procedural justice framework to personnel selection practices. In two separate studies he aimed to explore the determinants of perceived fairness in selection practices. In the first study a sample of 290 undergraduate students who had applied for at least one entry-level job were asked to think of their own experiences of applying for a job and to identify the one most important factor that would make the job fair. Eighty-nine unrepeated stories were collected and were reduced, by two independent assessors, into 21 determinants of fairness in selection. The same subjects were then asked to rate the importance of each of these 21 determinants on an 11-point Likert scale. A factor analysis with varimax rotation was used to examine subjects' responses. Five factors accounting for 69.9% of the total variance were identified. These included consistency and choice of selectors, two-way communication, ethicality, bias suppression, and information soliciting. A second study, using the identical methodology, was then conducted using a sample of 81 human resources management trainers employed in a variety of private consultancy firms or public organisations. The factor analysis yielded six factors accounting for 69.6% of the variance –honest communication and choice of selectors, information soliciting, open objective competition, consistency and ethicality, bias avoidance, prior knowledge of future colleagues. The researcher states that the five factors identified in the first study closely

resemble the factors identified in the second study, and that both sets of results closely correspond with Leventhal's (1980) six criteria. He argues that the results of this study extend the application of allocation preference theory to personnel selection practices (Ming, 1990).

Greenberg (1986) used a similar procedure in order to explore determinants of perceived fairness of performance evaluations amongst a sample of 217 middle managers employed in three organisations. In the first stage of the study 56 participants were asked to think of an incident where they received either a particularly fair or unfair evaluation of their job and to write down the one most important factor that contributed to their perception of fairness. The phrases were then abstracted into simpler statements and were typed onto index cards. In the second stage of the study the cards were given to the same participants who were asked to sort the statements into similar groupings. This technique is known as an unstructured Q-sort technique as no predetermined number of categories was specified (Stephenson, 1953 in Greenberg, 1986). In order for a response category to be defined at least 75% of the subjects had to have grouped two or more of the statements together. In this way the original 56 statements were reduced to 18, falling into seven different categories. In a third stage of the study these results were cross-validated by a sample of 46 subjects who categorised the 18 statements back into the seven categories. In this phase there was a 98.6% hit rate with only 12 statements being misclassified. Finally, in the fourth stage of the study a group of 75 participants were asked to rate, on a nine-point Likert scale, the importance of each of the seven categories as determinants of fair performance evaluations. Similar to the study conducted by Ming (1990), these responses were then factor analysed using a principal component analysis with varimax rotation. Results of this analysis indicated a possible two-factor solution with these two factors accounting for 94.7% of the variance. These two factors were labelled procedural and distributive factors, with five items loading in on the procedural

justice factor and two on the distributive. No significant difference was found between the two factors on the mean importance rating scores for each statement. Greenberg (1986) argues that these results provide evidence for some of Leventhal's (1980) criteria (particularly correctability and consistency) as well as Thibaut and Walker's (1975) concern for process control. He also states that the research findings support to "…conceptual attempts to expand procedural justice conceptualisations by applying them to organisational settings in general." (Greenberg, 1986, p. 341).

These two studies have a considerable amount in common. Firstly they are both attempts to apply social psychological theory about justice to work-related concerns, with particular emphasis on factors affecting perceptions of organisational procedures. Secondly they make use of very similar research paradigms and methodologies – they use a quantitative paradigm that starts off by collecting relatively large amounts of data, which is then analysed for patterns of responses and through the use of particular procedures, is finally reduced to a much smaller number of factors. The results indicate some interesting things about perceptions of fairness in that they suggest some of the types of factors people may find important in assessing the fairness of particular workplace procedures. This methodology allowed the researchers to distil the data in order to be able to extract information that is representative of patterns of beliefs and experiences. While this is often useful it also presents particular concerns.

Firstly in both studies participants were asked to write down the one most important factor in determining the fairness of the procedure. In this way the amount of information that is being obtained from participants is reduced from the outset and this potentially excludes some possibly important and rich information. The researchers are working from the assumption

that questions about justice are very simple, uncomplicated matters that people can easily identify and articulate. This might not always be true. What information we use, and in which particular ways we use it, when making a justice judgement is arguably a complex and not necessarily conscious process. Obtaining meaningful information from people about what impacts on their perceptions of fairness might, therefore, need some level of probing and directing. In addition to this the researchers are forcing participants to pick one factor when the respondent him/herself might have identified other, equally as important factors or might experience the procedure in a more complex way. It is arguably likely that a whole range of factors in combination with one another impact on perceptions of fairness.

Secondly the basis on which the reduction of the original statements into a fewer number of statements and into categories is done is somewhat unclear. For example in the study by Greenberg (1986) participants were asked to group the statements into similar categories, while in the study by Ming (1990) this was done by two independent assessors. What determines similarity? Could all the positive statements be placed in one category and all the negative statements in another? Statements that reflect some level of negative affect such as anger or cynicism could be similar to one another while ones that reflect more positive emotions could be grouped together. At what point do the assessors decide to ignore differences between statements, and what differences exactly? In addition to this the background of the people doing the assessing is likely to be relevant. If it is done by people familiar with the justice literature, as is the case in the Ming (1990) study, they might be looking for patterns that are predicted by the theory. In the Greenberg (1986) study it was being done by middle managers who might be influenced by the fact that they conduct procedures such as performance evaluations themselves and might also have received training as to what constitutes a ‘good’ way in which to conduct these procedures. While statistical

checks are put into place to ensure that there is high level of agreement between the assessors, no account is given as to why this level of agreement has been reached and whether this is entirely a good thing – if a different person or group of people were looking at the data might they have come up with a different pattern or set of categories? Arguably what is given back to participants in the final stage of the study (a short list of a number of factors) might not be entirely representative of what was originally written by the subjects.

While it can be argued that an almost infinite number of configurations might exist for the sorting of a large number of statements and one solution with high agreement is as good as another solution with high agreement, what is concerning is the lack of emphasis that is placed on this stage of the research. Given that the research questions are specifically about the factors that determine perceptions of fairness, the analysing of the original statements is arguably the most important part of the study – they are the answers to the research question. It seems that a process that is more able to account for the diversity and the complexity in responses is needed. For example participants might be encouraged to write as many statements as they wish, and a qualitative method such as thematic content analysis could be used to determine themes in responses. Alternatively once the initial sort has been done this could be given back to participants to assess whether their original concerns are reflected in the list of determinants. Or finally a different statistical procedure – one that relies less on the reduction of data and is designed to analyse interactions between responses– might be used. Arguably the methodology used in these two studies is particularly focused on reducing the data and in doing so fails to account for the complexity of justice perceptions. While not all organisational justice research uses the methodology presented in these two studies, many do use techniques aimed at distilling information in this way. This is evident when looking at

another area of organisational justice research, that of responses or reactions to perceptions of injustice.

Organisational justice research has explored a range of possible behavioural and cognitive responses to justice perceptions (Randall & Mueller, 1995; Katz & Miller, 1999; Moorman, 1991), focusing on both positive and negative consequences of justice perceptions. A number of different variables have been looked at in relation to the negative or dysfunctional outcomes of perceptions of injustice. Some such behaviours and attitudes that were found to be significantly related to organisational justice perceptions include theft (Greenberg, 1990), vandalism (De More, Fisher & Baron, 1988), workplace retaliation (Skarliki & Folger, 1997), absenteeism, (Schwarzald, Kowslowsky and Shalit, 1992), low workplace commitment, job dissatisfaction (Cropanzano & Greenberg, 1997), poor performance (Cowherd & Levine, 1992; Pfeffer & Langton, 1993), as well as staff turnover (Schwarzald, Kowslowsky and Shalit, 1992) and employee theft and retaliation (Greenberg, 1990).

A lot of these studies follow similar procedures and adopt similar methodologies in exploring such relationships - they tend to conduct either laboratory or field studies using self report measures that are designed to assess each dimension of organisational justice perceptions separately, which they then analyse by summing items for each sub scale and then using correlations or a regression technique in order to assess the nature of any relationship with other variables. For example a study conducted by Fitzgerald (2003) aimed to explore the role of perceptions of injustice (operationalised in relation to distributive, procedural and interpersonal components) as a precursor to organisational cynicism. A sample of 316 employees of a large manufacturing company electronically completed four questionnaires aimed at measuring feelings of cynicism (both cynicism towards the organisation and human

nature) as well as organisational justice perceptions (using an organisational justice scale developed by Colquitt, 2001). Results of a stepwise multiple regression indicated that higher scores on each dimension of justice (where a higher score meant higher perceptions of injustice) were predictive of organisational cynicism. The combined effect of distributive, procedural, and interpersonal justice on organisational cynicism was 29% of the variance. Fitzgerald (2003) hypothesise that organisational cynicism is a coping response to perceived organisational injustice.

This methodology and approach to exploring organisational justice is echoed in other studies. Aquino, Lewis and Bradfield (1999) developed a model that attempted to explain the relationship between, among others, justice perceptions (comprising all three dimensions of justice) and employee deviance, which they defined in relation to organisational deviance (acts directed against the company and its systems) and interpersonal deviance (acts that inflict harm on specific individuals). They hypothesised that perceptions of procedural justice would be negatively correlated with organisational deviance but not with interpersonal deviance, that distributive justice perceptions would be negatively correlated with interpersonal deviance but not with organisational deviance, and that perceptions of interpersonal justice will be negatively correlated with both organisational and interpersonal deviance. A questionnaire - comprising a distributive justice scale adapted from a scale developed by Niehoff and Moorman (1993), a procedural justice scale adapted from one developed by McFarlin and Sweeney (1992), an interpersonal justice perceptions scale developed for use in the study, and a deviance scale also developed for use in the study (the scale listed a range of behaviours and asked respondents to indicate the number of times they had performed each of those acts in the past 6 months) – was distributed to a random sample of 475 employees in two organisations of whom 245 people responded. A regression analysis

was conducted in order to explore the unique contribution of each dimension of organisational justice perceptions to employee deviance. Results showed that organisational justice perceptions accounted for a significant portion of the variance in interpersonal deviance but not in organisational deviance. The researchers then conducted a structural model test using a covariance matrix of the proposed model (as reflected in their hypotheses) as data input. They found that their first hypothesis, that procedural justice would be significantly correlated with organisational deviance, was not supported, but that the second and third hypotheses, that distributive justice would be negatively correlated with interpersonal deviance and that interpersonal justice would be negatively correlated with both forms of deviance, were supported.

Other studies exploring the relationship between perceptions of organisational justice and forms of employee deviance have also used comparable methodologies and found similar results. Greenberg (1990) used an experimental paradigm in order to explore employee theft as a reaction to perceptions of underpayment inequity. While he did manipulate perceptions of justice, he used very similar measuring instruments and statistical analyses to the other studies described above. The study was conducted in an organisation that was being forced to make wage cuts of 15% across the board in two out of three of its manufacturing plants in order to avoid having to make a series of retrenchments. The two affected plants were randomly assigned to two conditions – one where adequate explanations for the cuts were given and staff were treated with high levels of interpersonal courtesy, and the other where insufficient explanation for the cuts were given and no apologies or expressions of remorse were given. The third, unaffected plant, acted as the control condition for the study. Greenberg (1990) used two methods of collecting data about employee theft. The first was actuarial data on employee theft, and the second was a self-report measure that asked employees questions

about processes that were assumed to be underlying theft behaviour. Two additional questionnaires were used, one as a manipulation check and the other to establish differences in perceived payment equity. Results indicated that during the period of the pay cut, the theft rate in the inadequate explanation condition was significantly higher than in the adequate-explanation condition. Further the theft rate in the adequate-explanation condition was higher than that in the control condition i.e. where no pay cuts were made at all. Greenberg (1990) argues that a possible explanation for these results is that employees, when perceiving payment inequity, will increase their outcomes through pilfering from their employer.

Another study aimed at exploring retaliatory behaviours more broadly. Skarlicki and Folger (1997) investigated the relationship between each dimension of organisational justice perceptions and organisational retaliation behaviour, which they defined as "…adverse reactions to perceived unfairness by disgruntled employees toward their employer" (Skarlicki & Folger, 1997, p. 435). Two hundred and forty employees of a non-union privately owned manufacturing plant in the United States completed a questionnaire comprising four measures. Organisational justice perceptions were measured using a distributive justice scale that focussed on pay, Folger and Konovsky's (1989) procedural justice scale, and a nine-item interpersonal justice scale. Organisational retaliatory behaviour was measured using a scale that was developed through the use of a critical incident technique – two groups of seven employees were asked to list examples of retaliatory behaviours, based on a definition that was provided to them, that they had observed over the past six to 12 months. Seventeen incidents were then extracted from the list and were developed into a behavioural observation scale. Employees in the study were then randomly assigned a peer who they were asked to evaluate in relation to the frequency with which they were seen to engage in the list of behaviours. A hierarchical multiple regression was used in order to explore the extent to

which each dimension of organisational justice predicted organisational retaliatory behaviours. Results indicated a significant three-way interaction between the justice dimensions predicting retaliatory behaviours. Further probing showed that the relationship between distributive justice and retaliatory behaviours was significant only when perceptions of procedural and interpersonal justice were low, indicating that higher procedural and interpersonal justice perceptions moderate the relationship between low distributive justice perceptions and retaliatory behaviours.

Other researchers have used a combination of laboratory or experimental designs and field studies to explore questions about the impact of organisational justice perceptions on work related outcomes. For example in a study aimed at exploring whether the relationship between organisational justice perceptions and stress, Frances (2003) found that perceptions of distributive and procedural injustice were positively associated with reports of increased levels of stress. These results were found initially in a laboratory experiment that made use of vignettes, and were replicated in a sample of students as well as in a third study focused on school teachers. Frances (2003) thus argues the results demonstrate that perceptions of injustice and exposure to situations that are perceived as unjust are stressful. Stress, as a correlate of perceptions of injustice, was also explored by Kottraba (2003), who looked more specifically at role stress and absenteeism in relation to perceptions of organisational justice. Using a sample of 233 subjects from different organisations across a range of industries the researcher aimed to test the hypothesis perceptions of organisational justice were negatively correlated with role stress and absenteeism. Participants completed an online survey and results of a correlation analysis indicated that there was a strong negative relationship between perceptions of justice but not with absenteeism.

Perceptions of organisational justice have also been explored in relation to favourable outcomes such as job satisfaction, organisational commitment, organisational citizenship behaviours and productivity (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Dailey and Kirk (1992) conducted a field study on a sample of 88 employees of an engineering design company and a development laboratory in order to explore the relationship between perceptions of justice and job satisfaction, organisational commitment, and intent to turnover. Distributive justice perceptions were measured using a scale developed by Greenberg (1986) and procedural justice perceptions by a scale developed by Folger and Konovsky (1989). Interpersonal justice perceptions were not explored. Job satisfaction, organisational commitment, and intent to turnover were measured using validated scales with adequate reliability. Correlations showed a relationship between perceptions of distributive and procedural justice and job satisfaction. A step-wise multiple regression showed that job satisfaction was strongly predicted by perceptions of distributive justice and intention to turnover was more moderately predicted by procedural justice perceptions.

Afzalur (2000) conducted a study using a sample of 202 employed undergraduate students in order to explore the relationship between organisational justice perceptions and conflict handling styles. Specifically he was investigating whether justice perceptions influence employees' styles of handling conflict with their supervisors. Self-report questionnaires were handed to the participants. Organisational justice perceptions were measured using the Organisational Justice Inventory, which comprises 23 items distributed across three subscales aimed at measuring each dimension of justice perceptions. Conflict management styles were measured using the ROCI-II an instrument aimed at measuring five different conflict styles – integrating, obliging, dominating, avoiding, and compromising. A hierarchical regression indicated, among other things, that the three dimensions of justice, when considered jointly,

explained a statistically significant amount of variance in integrating, obliging and compromising conflict management styles. Taken separately, interpersonal justice perceptions explained a significant amount of variance in the integrating style and distributive justice explained a significant amount of variance in the avoiding style. Overall higher organisational justice perceptions were generally positively related to more co-operative conflict management styles.

As can be seen all of these studies have certain methodological similarities. They all understand organisational justice in terms of the tripartite justice model, and they all separate out the three dimensions of justice and explore them independently of one another. They make use of a quantitative paradigm that relies on self-report measures as a method of collecting data. These scales are also used in similar ways – each item is added up in order to provide a total score. It is this total score that is then used in the statistical procedures used. While this does allow researchers to use statistical tools such as correlations or regression analyses that explore the relationships between variables, it does arguably have the side-effect of ignoring variance between individual participants– for example two people could end up with the exact same total justice score despite having answered individual questions very differently. In addition to this, all the questions in the scale are weighted as equally important although there is no real indication that this is true. A person might score very low on one or two particular items, which then brings their total score down, classifying them as someone with lower justice perceptions. However, they might still have an overall high justice perception as those particular items might not contribute as much to their perceptions of justice as the other items for which they scored highly – i.e. they give an item a low score but it isn't really that important to them, or vice-versa. As such the way in which measurement

instruments are used serves to flatten information, looking at an overall picture that eliminates a lot of the detail, rather than highlighting differences, variance and complexity.

These concerns are echoed in other types of organisational research, such as those in which justice perceptions are looked at as mediating variables - in addition to exploring the relationship between justice perceptions and work related outcomes, organisational justice researchers have also looked at the ways in which perceptions of justice influence or mediate the relationship between other work related variables. For example Korsgaard, Schweiger, and Sapienza (1995) conducted a study aimed at testing the hypothesis that perceptions of procedural justice will mediate the relationship between consideration of team members input, and influence over decisions and commitment to the team decision, commitment to the team, and trust in the team leader. An experimental design was set up using a sample of 20 intact teams of middle and upper level managers of a Fortune 500 company in America. Each team comprised three to six team members and a team leader. In total there were 89 team members and 20 leaders. A two-by-two factorial design was used in which the researchers manipulated consideration of team members input (high or low) and team members influence over the decision (high or low). Teams were then randomly assigned to one of four conditions where they conducted a decision-making exercise. Self-report measures were used to assess the variables being explored. Procedural justice was measured with a four-item scale adapted from Tyler and Cain (1981). In order to test the hypothesis, an ANCOVA was conducted in order to determine whether when the variance due to procedural fairness was accounted for the relationship between the dependent and independent variables diminished. An ANCOVA is used when there are factors, termed covariates, which are expected to influence the dependent variable, which cannot be controlled by the researcher. An analysis of covariance (ANCOVA), a combination of an ANOVA and regression, is the statistical technique used to

take the effect of such variables into account. Results indicated that procedural justice perceptions do mediate – with varying strength - the effects of consideration and influence on decision commitment, attachment to the team, and trust in the team leader.

This study introduces a new concern, over and above ones already discussed in this chapter (such as the use of scales that average responses into a single indicator, scales that measure complex variables using a very small number of items, and the use of samples that solely comprise managers) in that there appears to be some conceptual confusion. Procedural justice, as is evident from discussions in Chapter 2, is defined largely in relation to the variables of consideration and influence – these correspond to Leventhal's (1980) criteria of representativeness and Folger's (1977) criteria of voice, and Thibaut and Walker's (1975) criteria of decision control. As such the independent variables and the mediator appear to be aspects of the same thing – procedural justice. This is perhaps indicative of the fact that researchers are not always able to differentiate between perceptions of organisational justice and other interpersonal behaviours. To some extent, justice perceptions are defined in such a way that they account for a very large range of behaviours and interactions, and this creates conceptual murkiness. As such the model being tested in this research is, to some extent, circular – the measures for consideration and influence will be measuring some of the things that are being measured by the procedural justice scale, thereby creating a significant relationship that is misleading.

As can be seen from the above discussion, the methodologies employed by organisational justice researchers reflect a research paradigm that has a tendency towards reductionism and carelessness regarding how justice is defined and measured. These concerns are also evident in other areas of organisational justice research, such as that focusing on individual

differences and perceptions of organisational justice. While this area of research forms the focus of Chapter 4, and will be discussed in more detail then, some consideration of these studies, with particular reference to their contribution to the overall body of organisational justice research and the methodological concerns being discussed in the current chapter, is warranted here.

As can be seen from discussions in this, and the previous, chapter, justice researchers have looked at a range of different variables that impact on perceptions of justice, such as characteristics of the procedure, interpersonal treatment received, the value bases that people ascribe to, as well as contextual factors. Another characteristic, that of individual differences, has been recognised as an important element in influencing perceptions of fairness (Cropanzano et al, 2001). Researchers have been interested in how personal traits of the individual such as personality, gender, age, ethnicity and a range of other factors impact on perceptions of fairness. For example Ang, Van Dyne and Begley (2003) looked at the role citizenship (i.e. foreign versus local workers) played in perceptions of organisational justice. They hypothesised that people from overseas countries coming to work in a foreign country might have different work attitudes and perceptions from the local workers. Using a sample of 213 Chinese workers and 253 local Singaporean workers they used a self-report measure to assess, among other things, perceptions of organisational justice. Results of t-tests indicated that the foreign workers had lower perceptions of distributive justice than the local workers. Similar research designs have been employed to look at differences in organisational justice perceptions based on gender (Lee & Fahr, 1999; Tata, 2000; Galea & Wright, 1999), nationality (Wenzel, 2000), and organisational role (Tata, 2000) among others, while race, gender, and job title have been compared as parts of larger studies (White, Tansky and Baik, 1995; Skarlicki and Folger, 1997)

Culture is one individual characteristic that has received considerable attention from organisational justice researchers (Bhagat & McQuaid, 1982; Cascio & Bailey, 1995; Hofstede, 1993, McFarlin & Sweeney, 2001). Several studies have been conducted by organisational justice researchers in order to explore the impact culture has on perceptions of organisational fairness. For example White, Tansky and Baik (1995) conducted a study aimed at exploring the differences in perceptions of organisational justice (specifically distributive, procedural and interpersonal perceptions) between a group of 164 Virginian and 102 South Korean undergraduate students. They then used a model of culture developed by Hofstede (1980) to explain these differences. A scale developed by Dorfman and Howell, (1980) was used to measure different dimensions of culture as specified by Hofstede (1980) (This model is discussed in more detail further on in this chapter) and participants were asked to assess the fairness of three different vignettes, each one pertaining to a different dimension of organisational justice i.e. distributive, procedural, and interpersonal justice. T-tests were used to explore differences between the countries in relation to perceptions of justice and cultural dimensions, and correlations to test the relationships between the variables. Finally hierarchical multiple regression was used to assess the effect of country on perceptions of justice while controlling for the cultural dimensions in order to assess the feasibility of using country as a surrogate measure of the cultural dimensions. Results indicate that there were significant differences between the two groups on all three dimensions of justice. Of the five dimensions of culture that were measured, the groups differed significantly on two – the South Korean students were higher on the masculinity/femininity dimension as well as on the paternalism dimension. Further, distributive justice was positively correlated with two of the cultural dimensions (paternalism and masculinity and femininity), and interpersonal justice with three dimensions (power distance, paternalism, and masculinity and femininity). The

hierarchical multiple regression showed that after controlling for the cultural dimensions, country had a significant effect on all three dimensions of justice perceptions.

This study presents a number of concerns already discussed in this, and the preceding, chapter. It makes use of a student sample, the majority of whom have never worked in an organisational context. It also makes use of measures of justice that are reductionist and ignore any complexity in perceptions – in this study each aspect of justice is measured along one dimension only (for example in the interpersonal justice vignette a student goes to see a professor to discuss performance on a test and the professor responds by saying, "Why waste my time? It won't make a difference anyway". This scenario only evokes one interpersonal justice concern, and ignores issues such as justification, quality of information, trust etc). A further concern is that the researchers define this study as an organisational behavioural one, and they use organisational concerns and what they define as an organisational justice framework as the basis and rationale for the research. However the methodology does not bear this focus out – the cultural dimensions scale has an organisational orientation (it applies Hofstede's (1980) cultural dimensions to the organisational setting by asking about agreement with statements such as "Managers should help employees with their family problems"), but the vignettes given to the participants focussed on student life like receiving a low mark for an assignment or having an assignment not marked by a professor. As such what is being correlated becomes confusing – beliefs about organisational functioning based on different cultural orientations and justice perceptions of student life. In the discussion the researchers then talk about the implications the research has for organisational procedures and policies. They thus seem to be conflating organisational justice concerns (which have been specifically defined in relation to the workplace and workplace concerns) and justice concerns about university (which differ significantly from the workplace in that students do not earn a living

from doing university work, work is not regulated and evaluated in the same way that it is in the workplace, and professors cannot be likened to managers or supervisors). It is not clear then how this study can be defined as organisational justice research. Further to this there is some concern that the cultural dimensions scale is measuring some aspect of organisational justice – statements such as "Managers should make most decisions without consulting subordinates" in the culture scale can be likened to the procedural justice concern of representativeness (Leventhal, 1980) or voice (Folger, 1977), and "Group welfare is more important than individual rewards" reflects the debate between utilitarianist and liberal conceptions of justice, as well as equity theorists and their critics, as discussed in Chapter 2.

One fundamental concern about this study refers to the use of Hofstede's (1980) cultural model, and this is a concern that can be generalised to the much larger body of work in this area. Studies exploring the impact of culture on perceptions of justice often define culture in terms of the model developed by Hofstede (1980) – in fact most research on the effects of culture on perceptions of justice has been largely based on Hofstede's (1980) model (White, Tansky and Baik, 1995; Morris & Leung, 2000). This model was developed as the recognition that culture can contribute to divergent beliefs and attitudes towards workplace variables resulted in researchers attempting to identify basic cultural dimensions along which different countries can be seen to vary, in order to categorise these countries in relation to such dimensions (McFarlin & Sweeney, 2001). This is done so as to help international managers lead and motivate employees from different cultures in the best possible way (McFarlin & Sweeney, 2001). McFarlin & Sweeney's (2001) argue that Hofstede's (1980) cultural dimensions model is the most successful attempt emerging from this effort. Hofstede (1980) conducted a survey of over 100 000 workers in 40 countries from which he produced a model of four cultural dimensions into which all of these countries and workers can fit. These

dimensions include individualism-collectivism, masculinity-femininity, power distance, and uncertainty avoidance. The United States or the United Kingdom, for example, are classified as individualistic cultures as they value autonomy, individual achievement, and privacy. Mexico and Japan, on the other hand, are collectivist cultures as they are viewed as being part of groups that protect and take care of them in exchange for their loyalty. Masculinity refers to whether the "assertive acquisition of money and power is highly valued" (McFarlin & Sweeney, 2001, p 69) such as in Venezuela, and femininity to "…whether people, the quality of life, and goods relationships with co-workers should take precedence…" " (McFarlin & Sweeney, 2001, p 69) as in Sweden. Power distance (which is regarded as the extent to which people can accepts large differences in power between individuals or groups) is higher in cultures such as India, where people are "…more likely to feel that some individuals are destined to be in command and others are not." " (McFarlin & Sweeney, 2001, p 69), as opposed to the United States, where people fear the concentration of power. Uncertainty avoidance refers to how people in a country react to unambiguous events, where weak uncertainty avoidance countries such as Denmark are comfortable with the notion that life is unpredictable, while countries such as France prefer more stability.

The concerns with such a model are numerous. It is clear that such an approach is extremely reductionist, both in the belief that an entire country can be characterised by a set of cultural dimensions, and the notion that four dimensions can encapsulate the whole experience of culture. Both the complexity of culture as well as multi-culturalist reality of all countries is ignored – no cognisance is given to the fact that different groups in every country have different accounts and experiences of culture. In addition to this the model cannot be seen to be exhaustive in that it does not account all dimensions along which cultures vary. While there has been acknowledgement that this model has limitations in that many eastern

European, African, and Asian countries were not included in the survey (which given that these countries may represent aspects of culture which are remarkably different from the United States and western Europe, could be considered an insurmountable problem), as well as the fact that 'within-country differences' were not accounted for (McFarlin & Sweeney, 2001), these concerns are largely ignored by justice researchers..

This unidimensional, static view of culture is perhaps even more apparent in descriptions of culture in African countries. McFarlin & Sweeney (2001), for example, state that, "In fact, for many Africans, 'just management' is captured by concepts like ubuntu. This cultural perspective views organisations much like an African village where an informal communal orientation holds sway. As such ubuntu stresses supportiveness, co-operation, and people working for the common good…" (2001, p. 76). This view is worrying not only in that it perpetuates a number of stereotypes about African countries and organisations (the idea of a communal village brings to mind images of primal, tribe-like people), but also because it ignores a range of cultural diversity and difference - Africa is a continent that comprises approximately fifty countries, all of which differ from one another considerably, economically, politically, historically, and culturally. To speak of 'African' conceptions of culture is not only to ignore the multi-culturalism within a country, but within an entire continent. It serves to reduce hundreds of different experiences, stories, and claims to one over-simplified notion – that of ubuntu. This use of the term ubuntu as a catchall phrase to describe a stereotypical notion of collectivist African culture is highly problematic in itself, and it's use in this way is contested and resisted within South Africa. Unfortunately such reductionist views are perpetuated by the South African popular media (and very often management consultants) as is evident from this account - McFarlin & Sweeney are citing a South African management text (Khoza, 1994).

Further to this, it has been argued that general cultural structures might emerge statistically, when aggregated over a large sample, but that these structures do not exist in individual minds (Morris & Leung, 2000). It is further argued that while large generalisations may be useful for presenting a consolidated picture that might be valuable in describing differences between societies, these are not useful in representing the values or beliefs that influence perceptions and behaviours (Morris & Leung, 2000). As such the value of Hofstede's (1980) model as a tool to explore and explain differences in individual perceptions of justice is arguably very limited.

Concluding Remarks

In the introduction two aims were articulated for this chapter. The first relates to outlining and describing the domain of organisational justice research In attempting to address this first aim one particular concern was raised – in order to describe the area of organisational justice its identity as something separate from the justice discussed in Chapter two had to be ascertained. As stated earlier researchers have argued that organisational justice concerns are autonomous and independent from other justice concerns. This assertion has spawned a prolific amount of research that now constitutes the area of organisational justice. Despite this, there is no clear evidence that this claim to autonomy is true. Organisational justice research has not focused on providing empirical evidence for this contention, nor has a body of theory specifically aimed at addressing workplace concerns emerged - as the discussion in this chapter demonstrated, organisational justice does not in fact emerge from a theoretically distinct body of literature, it shares exactly the same theoretical foundations as the more broader social psychological field of justice as discussed in Chapter 2. Currently, what delineates this

variable as something distinct is the context in which it is investigated – the workplace. It is, therefore, clear that the notion that organisational justice is something separate from other types of justice - as well as the ways in which this may be, the implications thereof, and the ways in which it articulates with other justice concerns and the body of theory from which it emerged - requires some debate and empirical investigation. The current study thus aims, among other things, to begin an exploration into the question of differentiating types of justice and the ways in which these types might articulate with one another.

This type of investigation becomes increasingly important in the face of the criticisms of reductionism and insularity made in relation to the conceptualisation and implementation of research in the area. As discussed in the introduction, in many ways the organisation functions as a microcosm of the larger society, with distinct rules, processes, boundaries, and ways of functioning, making it an interesting, as well as easy, context for the study of justice. There are, however, some negative consequences to maintaining such a bounded and insular focus on the workplace. Very little of the research conducted within this area accounts for the workplace as an institution of a broader society, with issues emanating in the workplace being, in many ways, just echoes of the practices and beliefs of the society in which they are located. As discussed in Chapter 2, the psychological framework tends to describe justice concerns in a very linear fashion, often failing to recognise the complexities of the phenomena manifesting themselves, in this case in the workplace. For example, in the South African context, black employee's experiences of justice in the workplace could arguably be closely linked to their experience of Apartheid and the way in which work served to form part of their oppression. Perceptions of workplace relations, procedures and distributions will all be viewed through the lens of such experiences. It is not only past events and contexts that impact on perceptions – a person's current living conditions will also influence the way in

which they experience the workplace (and many other contexts). Many people, for example, even those who are employed, are living under intractable conditions, and are confronting crime, poverty, HIV/AIDS and a range of other life threatening problems as part of their daily lives.

Attempts to isolate these broader experiences from the experiences people have in the workplace are possibly both problematic and misleading. For example, when a person has to catch several taxis to work, and thus starts his/her day at 5:00a.m. and finishes it at 8:00p.m., is supporting a large family of people who are unable to find work, when access to even basic health care is exceptionally difficult, workplace policies, salary, and work sponsored medical aid take on a particularly urgent meaning. To attempt to account for a person's perception of a particular policy by simply questioning them about the procedure used to develop the policy, the way in which the policy was relayed to them, or even in terms of their perception of the policy itself, fails to account for how that policy is an echo of much larger policies and practices, both present and past.

This becomes particularly pertinent within the South African context given our history of the perpetration of gross and systematic injustice at every level of society. There is no doubt that broader societal concerns about past discrimination, race relations, poverty, unemployment, as well as politics, are all emerging as important workplace concerns. In addition, new labour legislation is having a direct impact on almost every area of workplace functioning, including selection, recruitment, discipline, assessment, and training and development. Concepts about justice that emanate elsewhere in society are, therefore, clearly imported into the workplace. These cannot then be taken to stand independently as workplace concerns. The Employment Equity Act with its legislation of Affirmative Action is a clear example of this. Concerns

about redressing past injustice to black, coloured and Indian South Africans have resulted in a statutory policy with regards to recruitment of the previously disadvantaged. The psychological paradigm would, in attempting to explore this policy of affirmative action, explore people's perceptions of the affirmative action policy, their attitudes to the way in which this policy was developed, and would attempt to account for a relationship between these sets of attitudes and other workplace behaviours or attitudes (such as job satisfaction, organisational commitment, or organisational citizenship behaviours) (Bobocel, McCline & Folger, 1997; Bobocel, Davey, Son Hing, & Zanna, 2001; Kravitz, 1995; Kravitz, Harrison, Turner, Levine, Chaves, Brannick, Denning, Russel, Conrad, 1997). What it would fail to do is account for how affirmative action policies are representative of a societies attempt to address past (and present) practices of oppression and human rights violations, and how such policies are associated with a range of other changes occurring in that society (such as a new constitution). In addition to this, such a policy is representative of huge social shifts, in which different groups have large investments. As such a person's belief about the 'fairness' of affirmative action cannot be separated from their experiences and perceptions of what is happening in the much larger context of the society, as well as their past experiences of that society.

While it is arguably not possible to account for all of these factors in empirical studies, it is an indication that research in the area of organisational justice needs to begin accounting for the influence of broader factors relating to perceptions of justice in the workplace. Who a person is when they are outside of the organisation can clearly have an important impact on how they experience justice in the organisation itself. As such even if organisational justice is understood to be a separate concern from that of social justice, account still needs to be given of broader social forces. Arguably the importance of researching justice in the workplace

settings is the recognition that workplace settings are influenced by, and in turn influence, the rest of society. An open systems approach maintains that the organisation does not operate in isolation from the rest of society, but rather external factors such as the economy, politics, legal factors, historical context, social and demographic factors, as well as technological factors all act on the workplace as inputs (Tustin, 1994). These inputs are processed through the workplace, and result in outcomes such as productivity, employment turnover, absenteeism, profit, strike action, and job creation all of which impact on broader society. In turn, these become inputs into the organisation again (Tustin, 1994).

A further concern about the insular focus of organisational justice researchers is that issues of fairness are explored to the extent that they emerge as a concern for managers. While justice has been researched rather considerably within organisations, it is arguably done so in relation to a particular set of managerial concerns. This may be because within this paradigm justice theory is seen predominantly as a theory of motivation. Tyler and Blader (2000), state "Justice must be able to motivate both the acceptance of rules and decisions and efforts to help the group even when either departs from individual or group self-interest. In terms of social co ordination, justice has little value if it does not influence how people feel and what they do." (Tyler and Blader, 2000 , p. 70). They argue that research findings that support the notion that justice perceptions influence people's attitudes and behaviours point to important policy implications in that "They suggest that we can encourage desirable behaviour from the people in groups by creating group frameworks that are experienced as fair." (Tyler and Blader, 2000, p. 8). The view that justice perceptions can be used to mitigate the negative effects of certain workplace policies or enhance employee functioning is a common thread running through this type of research - employee commitment, morale, turnover intentions, organisational citizenship behaviours, productivity, theft and a host of other attitudinal and

behavioural variables have all been explored in relation to perceptions of organisational justice. This is arguably resulting in a blurring of the distinction between psychological academic enquiry into organisational practices (which should be emanating from a particular theoretical base and have appropriate standards for argument construction) and that of the business sciences (which have different theoretical bases and applications of knowledge).

This leads into issues raised in relation to the second aim of this chapter, that of critically evaluating this body of research described, with particular reference to methodological concerns. As was argued in this chapter research methodologies employed by organisational justice researchers have a tendency to reduce the amount and quality of information being gathered, and then to further reduce this information through the use of particular statistical procedures. More systemic thinking that acknowledges the complexity of justice will demand research methodologies that extend beyond linear thinking. The recognition of complexity require that we move away from trying to simplify or reduce variables into measurable units, but rather find methodologies that can account for and help explore this complexity. As such what questions are asked, the way in which they are asked, to whom they are asked, and what tools are used to analyse the responses all need to fall under close and critical scrutiny – the limitations of current methodologies need to be given far more meaningful attention, and problems with such methodologies that are in fact insurmountable need to be acknowledged.

Chapter 4: Individual Characteristics and Perceptions of Justice

Overview

In Chapters 2 and 3 the construct of justice was discussed, both in terms of broader notions of social justice as well as in relation to questions about justice in organisations. Concerns about the theoretical paradigm – which understands justice in relation to distributive, procedural, and interpersonal concerns – were identified and discussed, as well as about the methodological underpinnings of much of the social-psychological research conducted in this area. Chapter 3 was concluded with an argument that called for the conceptualisation and operationalisation of research that accounts for more of the complexity involved in experiences of justice. In the preceding chapters three arguments that could constitute a point of departure for such a new conceptualisation have been made – resisting the use of the tripartite framework for understanding perceptions of justice, looking at organisational justice concerns in relation to a much broader set of factors and concerns, and using research methodologies that do not operate in an overly reductionist manner. This chapter aims to propose a specific set of problems that are firstly, arguably in need of investigation, and secondly, would best be investigated in these less conventional ways – that is the study of individual characteristics, with particular reference to demographic variables, in relation to experiences of justice.

The chapter begins with a discussion of theories that indicate the importance of individual characteristics, particularly demographic variables such as race and gender, for notions of social and group identity. The first theory under discussion is that of social identity theory as proposed by Tjafel and Turner (1979) who discuss the importance of self-categorisation in

relation to identity. A review of research that uses demographic variables as indicators or markers of social identity are discussed. The discussion then moves more specifically into the area of justice, and the role that demographic variables and identity play in shaping perceptions and experiences of justice. This includes arguments made by Young (1990) and Sen (1999) who propose a broader conceptualisation of justice than that posited by justice theorists across all disciplines, one that accounts for the intricacies of individual situations and the ways in which this may impact on how people experience justice. The first part of this chapter is then concluded with commentary from social psychological researchers who also argue for the importance of looking at social categories when exploring questions about justice.

The second part of this chapter then provides a critical review of research that has explored demographic variables and perceptions of justice. Much of the research in this area has focused on gender, race, and nationality when exploring perceptions of justice, and as such this forms the majority of research described in this chapter. Other variables such as religious affiliation and socio-economic status have also received some attention, and are thus included in this section. The chapter concludes with a discussion of the key arguments to emerge from this chapter – specifically the importance of exploring demographic variables in relation to questions about justice, as well as the importance of using methodologies that are considered and that can account for the complexity of this area.

Individual Characteristics and their Relationship to Justice Perceptions

Self, self-identity, and self-concept are "virtually synonymous terms" (p. 73) used to refer to the set of perceptions that a person has of who he or she is as a distinct person (Pedersen,

1999). The concept of the self has been fundamental to many psychological theories including psychoanalytic theory (Freud, 1963), phenomenological theories (Rogers, 1959) and personality and trait theories (Allport, 1961). The belief that identity is socially constructed is a central assumption underpinning much of the work in this area (Frable, 1997), as is the understanding that identity labels are "fluid and multidimensional" (Day, Cross, Ringseis & Williams, 1999).

Social identity theory, which argues that identity derives from peoples knowledge that they belong to a particular group, and the meaning that this association has for them (Tjafel, 1981), has dominated identity research (Cassidy & Trew, 1998). Tajfel and Turner (1979) argue that group identity is synonymous with social identity. They state that social identity refers to '…those aspects of an individual's self-image that derive from the social categories to which he perceives himself belonging." (1986, p. 16). As such they argue that group identity provides a definition of the self. This social identity theory argues that people's psychological processes change within group settings. When we perceive ourselves as members of a social group, we adopt a social identity and think of ourselves in terms of that group membership. Individuals validate their social identity by favouring the group to which they perceive themselves as belonging (the 'in-group') at the expense of all other groups with which they have not associated themselves (the 'out-group') (Tjafel, 1981). Turner (1991) argues that people will adjust their attitudes, behaviours and perceptions to match the collectively defined attributes of their social group – i.e. similar identities are likely to have similar social representations or "shared cognitive constructs" (Hogg & Abrams, 1988).

The process of defining oneself in relation to a particular group is referred to as self-categorisation. This process is based on the use of prototypes [i.e. a representation of the

features that best define a group (Oakes, Haslam, & Turner, 1998 in Cassidy & Trew, 1998)] where individuals evaluate themselves in order to assess the extent to which they match the group prototype (Cassidy & Trew, 1998). Group membership can be identified along many lines. Pederson (1994) developed a model in which four components of identity were identified. These included Spiritual factors such as religious affiliation, degree of religiosity, being a spiritual person etc, Personal/Social factors such as personal and social traits, Family factors such as family composition and relations, and Identifications factors such as gender, race, home address, nationality or place of birth (Pederson, 1994). Demographic variables can be seen to underpin all of these components (although certainly not account for them) – religious affiliation, number of dependants, number of children, area in which one lives, number of people living in a house hold, financial status age, race, and gender may all be very good population descriptors, but they are all also central to at least one of the components described above. However, as mentioned above, this identity is recognised as being multidimensional and dynamic rather than fixed or static. One's identity may change across situations and contexts, and certain features of one's identity may become more or less salient with shifts in time and context (Jaret & Reitzes, 1999).

Stryker's identity theory (Stryker, 1980) which is based on Mead's notion of symbolic interactionism, recognises the multidimensional nature of identity. In this theory, Stryker (1980) proposes that individuals construct multiple identities in order to correspond with the multiple roles and statuses they have. Symbolic interactionism suggests that the meaning and relative importance of a particular identity may vary across contexts and settings – across settings individuals effect different identities, and the importance of identities may diminish or rise. Stryker (1980) uses the term salience to refer to the likelihood that a particular identity will be activated, and psychological centrality to refer

to the relative importance a particular identity has for an individual. There are a number of identity components that have been argued by social psychologists to carry 'master status' – that is this component will dominate all other components in nearly all social situations. These include race, gender, class, and sexual orientation (Jaret & Reitzes, 1999).

As such, demographic characteristics are seen to be central to notions of identity. It is recognised that demographic characteristics such as age, gender, or race provide salient features against which individuals categorise themselves (Schneider, K. & Northcraft, G.B., 1999). Considerable research has been done exploring demographic variables as markers of social identity. For example, in a study on 159 students at a Hong Kong university, Tong, Hong, Lee and Chiu (1999) looked at language as a carrier of social identity. In this study, the researchers used nationality as an indicator of social identity (they asked students to categorise themselves as being either a Hongkonger or Chinese). Using an experimental design, they then asked the students to listen to conversations between a Hongkonger and a Chinese person, conducted in different languages – the official languages of each group - and then complete an intergroup attitudes measure. Results indicated that those who have a strong Hong Kong identity were resistant to Hongkongers using the language of the 'out-group', and expected other Hongkongers to speak in the 'in-group' language when speaking to members of the 'out-group'. As such this research indicated that language is strongly associated with aspects of social identity (specifically nationality). In this study a demographic variable, that of nationality, was used as a direct measure of social identity. This is not unique to this research. Many other researchers used one or several demographic descriptors to define different aspects of social identity.

For example, Jaret and Reitzes (1999) explored the importance of racial identity in different settings (at home, in the neighbourhood, at work, and in the public) and in relation to other identities - that of gender, age, occupation, marital status, and social class. They also looked at the importance of racial identity for self-concept, and investigated the possibility of gender differences in relation to the perceived importance of racial identity. As can be seen, in this study an array of demographic variables were looked at as defining different aspects of social identity. Their study was conducted on a sample of 533 adult residents of 48 states in America. Participants were interviewed telephonically. Results indicate that for black people racial identity is a more important component of self-concept than it is for white or multi-racial people. The importance of racial identity also varied across settings for black and white people, with it being most important for black people at work, and least important at home. For white people racial identity was found to be most important when in public, and least important at home or when in their own neighbourhood. With regards to the relative importance of racial identity, contrary to the researcher's expectations it was found that for all three groups, gender was identified as being the most important identity. Finally, no differences were found between men and women's assessment of the importance of racial identity.

A further example of the use of demographic details as indicators of social identity is evident in the following study in Northern Ireland. Cassidy and Trew (1998) explored the relative importance of national and religious identities in relation to four other identities (that of family, friends, boy/girlfriend, and university) for 216 university students. While insufficient detail is provided regarding how different identities were measured, it is indicated that the majority of scales had one item. As such participants were, for the most part, asked simply to classify themselves into a group. Participants completed salience and centrality measures for

each of the identities. Analyses revealed that while the students did value national and religious identities, they were accorded low salience and centrality relative to other identities. In addition to this there were some differences found in relation to religious and national identities between Catholics and Protestants (with Catholics displaying higher levels of affective commitment to national identity then Protestants).

The importance of certain demographic variables as indicators of social identity has also been explored within the South African context. Heaven, Stones, Simbayi, and Le Roux, (2000) conducted research using a sample of 615 undergraduate Humanities and Social Sciences students drawn from three South African universities. In this study the researchers explored the relationship between social identity and two values, that of national strength and international harmony and equality. Social identities were defined in relation to the following groupings: African, South African, rural dweller, city dweller, conservative, progressive, global dweller, religious, English-speaker, and Afrikaans speaker. Race was also incorporated as a marker of social identity. The results of the research indicated that people who classified themselves as Afrikaans linked strongly with religious affiliation. Self-identified black South Africans, on the other hand, associated themselves with more encompassing identities such as South African or global dweller.

While demographic variables cannot be seen to be synonymous with identity, they are clearly important markers of one's social position i.e. the space which one occupies in a given group, community, or society. This social position can, in turn, be seen to be central to the kind of access a person has to societal resources, respect, dignity, rights, as well as a range of other goods and conditions. This is arguably particularly true within the South African context where factors such as race and gender had, and continue to have, a direct relationship

with factors such as where you live, what you earn, the kind of education you are likely to receive, and at one time even whether you could vote or who you could have sex with. As such, these demographic variables (as indicators of social position) do have a direct relationship to experiences of justice.

Chapters 2 and 3 provided an overview of the history and current status of theoretical and empirical investigations into the area of justice. Such theories and studies are now coming under criticism from theorists in that they are seen to be limited in their scope and understanding of justice, particularly in understanding how individual circumstances can impact on experiences of distribution and justice.

The importance of accounting for social relationships ~~and identity~~ when exploring questions of justice is also emphasised by Young (1990). She argues that while matters of distribution are certainly important, the context of justice concerns needs to be widened to incorporate all aspects of institutional context, structures, and social relations that are subject to potential collective decision. She asserts that the way in which justice is defined needs to be broadened as people have an active interest in values of justice other than purely distributive ones, such as participation in processes, acquiring and using skills, receiving recognition for participation, communicating with others and enjoying rewarding social relationships. Young (1990) thus views social justice as the extent to which a society possesses and supports the development of institutional conditions necessary for the realisation of these values. She asserts that these values are encompassed in two general values, that of the ability to develop and exercise capacities and express experience, and participating in determining your own actions and the condition of your actions. Correspondingly, there are two conditions that define injustice, namely oppression (the institutional constraint on self-development) and domination (the

institutional constraint on self-determination). She, therefore, provides what she views to be a much broader concept of justice defining it as the elimination of institutionalised domination and oppression - it is the concepts of domination and oppression, rather than the concept of distribution, that she argues should be the starting point for a conception of social justice (Young, 1990, p. 16).

Young (1990) argues that groups ~~and social identity~~ are central to the notion of oppression, as it is groups who are the target of oppressive actions. She states that our daily discourse differentiates people or allocates them to groups on the basis of factors such as gender, age, race, religion etc. A social group is thus a collective of people differentiated by cultural forms, practices, or way of life. Members of social groups develop an affinity with one another because of their shared experiences, even if they also view themselves as belonging to the same broader society. She argues that there is an important distinction between social groups and what she terms 'aggregates' – aggregates are the classification of people according to some attribute, where the attribute does not necessarily have any emotional or social salience (e.g. eye colour, whether you wear glasses or not and so on), while social groups are defined by a sense of identity that emerges from shared attributions. She argues that certain characteristics such as age, gender, local, occupational group, and religion are not mere descriptors as has been argued by some justice theorists, but rather form an important part of one's identity and one's experience of justice. These social groups are not homogenous, and they thus function in a complex way, with group differences cutting across one another – for example women are differentiated by age, race, class, sexuality, region, nationality etc, the salience of which could increase depending on the context. Young (1990) argues that oppressive behaviours (being one of the defining features of injustice) such as exploitation and marginalisation have historically been targeted at social groups who are defined in relation to a set of individual characteristics

such as race, gender or age. Given the centrality of groups and group identity to the experience of justice, theories of justice need to account both for the importance of group identity as well as the complexity of these groups and identities.

Similar concerns about the conceptualisation of justice are articulated by Sen (1999). Like Young (1990) he proposes an understanding of justice that moves beyond that proposed by current theorists, particularly utilitarian and libertarian ones. In exploring these theories Sen looks at the 'informational bases' that these approaches use in order to make a distribution decision. An informational basis is defined by Sen (1999) to be the information that is needed, or alternatively excluded, by a particular approach, in order to make a distribution decision. Sen argues that "In fact, the real 'bite' of a theory of justice can, to a great extent, be understood from its informational base: what information is – or is not – taken to be relevant." (1999, p. 57). He views both libertarian and utilitarian theories as using very limited informational basis - in Utilitarianism (most specifically in its classical form), utility, which is defined as happiness, pleasure or satisfaction is seen as the only basis upon which to make distributive rules. Factors such as individual freedom, liberty, or aspects of quality of life are not considered unless they have some direct bearing on utility. Their role is purely indirect (Sen, 1999). Another type of information that is excluded within this paradigm is the actual distribution of utilities – only the total utility to everyone is considered to be relevant (Sen, 1999). As such, Sen (1999) argues that utilitarianism uses a very limited informational base. Likewise, libertarian theories exclude information about happiness. Instead, their informational base focuses almost exclusively on rights and liberties of the individual.

It is thus clear, Sen (1999) states, that given these contrasting informational bases, these two views of justice are incompatible and the appropriate theory of justice is neither the utilitarian

approach with its narrow focus on happiness, nor the libertarian view with its opposite but equally narrow focus on liberty. He maintains that there are many factors that effect the extent of the utility or range of opportunities one may get from a particular distribution. Two people with exactly the same amount of money but who operate in varying contexts will get a different degree of benefit from that money. As such he contends that when operating from such a narrow informational base, it is not possible to compare the values particular distributions will have for people.

Sen identifies five sets of factors that effect the relationship between 'real income' and the advantages (either well-being or freedom) that can be obtained from it. The first he terms 'personal heterogeneities', which refer to physical characteristics such as illness, age, disability, and gender that make people's needs diverse. A person suffering from an illness, or a person with a disability, would not obtain the same quality of life from a particular income as a healthy or physically-abled person might. They would require more income (for medication, prostheses, etc) in order to enjoy the same quality of life, if that were even possible. Within this category, the need for 'compensation' due to the disadvantage would vary between people. The second set of factors, Sen refers to as 'environmental diversities' which incorporates all environmental conditions that may impact on the value one can extract from an income. He asserts, for example, that weather conditions such as extreme temperatures or rainfall, or the presence of infectious diseases such as AIDS or Malaria, alters the quality of life people living under those conditions may enjoy. The third set of factors to which Sen refers is 'variations in social climate', which concerns things such as educational facilities, levels of crime and violence, and the quality of community relationships. The fourth set of factors is 'differences in relational perspectives', which pertains to the "commodity requirements of established patterns of behaviours" (Sen, 1997, p. 71). Sen argues that different communities have different customs

and conventions that can impact on a person's capacity to function within those communities. He proposes that in some wealthier communities for example, to be able to engage in activities without shame may require a higher standard of clothing or other visible consumables than in a poorer community. As such a person can be *relatively* poorer than someone else who has a lower real income than them. The final set of factors is that of 'distribution within the family'. Sen contends that the family is the basic unit of income use – the family members, whether they are earners or not, share earned incomes. As such the rules used to distribute resources within the family unit, such as age or gender , can greatly influence the capacity of individual members to achieve.

Sen asserts that these five sources of variation in people's capacity to convert income and resources into quality of life means that wealth or opulence, in the form of a high income, is a very limited indication of welfare or quality of life. As an informational base for assessing justice, it is very limited. Given all the limitations of the predominant justice theories, particularly with regards to the informational bases they consider relevant, Sen attempts to provide an alternative paradigm that incorporates other types of information. He contends that a more encompassing approach would be one that considers the 'actual living' that people are able to achieve. Taking this further, he proposes that focusing on the freedom people have to achieve 'actual living' is a more accurate representation of the value of distributions to those people. As such he advocates a focus on the freedoms engendered by income, rather than on the income seen on its own (Sen, 1997). He states

> …for many evaluative purposes, the appropriate 'space' is neither that of utilities (as claimed by welfarists), nor that of primary goods (as demanded by Rawls), but that of the substantive freedoms – the capabilities – to choose a life one has reason to value. If the objective is to concentrate on the individual's real opportunity to pursue her objectives… then account would have to be taken not only of the primary goods the persons

> respectively hold, but also of the relevant personal characteristics that govern the conversion of primary goods into the persons ability to promote her ends. (Sen, 1997, p. 74).

Both Young (1990) and Sen (1999) are arguing for a broader conceptualisation of justice, one that accounts for, among other things, the context and set of circumstances that individuals operate in and that impact on their experiences of justice. Young (1990) argues that social groups, developed in relation to individual characteristics that form the basis for social identity, are central to oppression and domination, the defining features of injustice. Sen (1999) argues that personal circumstance and context impact directly on the potential value of distributions, and as such cannot be ignored by any conceptualisation of justice. Demographic variables, as they relate to questions of ~~identity~~ social position and context can, therefore, be seen to be central to notions of justice. However, the importance of these inter-related concepts for perceptions and experiences of justice has largely been neglected by social psychological research (Wenzel, 2000). This is particularly relevant in relation to distributive justice research and literature as inherent in the notion of distributive justice is the presupposition that boundaries exist that define membership and non-membership in a community (Wenzel, 2000, Cohen, 1991). Walzer (1983) argues that it is this membership that underpins all other forms of distribution. He says:

> The idea of distributive justice presupposes a bounded world within which distributions take place: a group of people committed to dividing, exchanging, and sharing social goods, first of all among themselves…The primary good we distribute to one another is membership in some human community. And what we do with regard to membership structures all our other distributive choices: It determines with whom we make those choices, from whom we require obedience and collect taxes, to whom we allocate goods and services (Walzer, 1983, p. 31).

As such, Cohen (1991) argues that group membership is the primary good at issue with regards to concerns about distributive justice. He states that before any allocation or justice judgement is made, a group of recipients must be circumscribed. He therefore argues that researchers may learn as much about justice by exploring how boundaries are drawn and group-membership defined as by noting how resources are allocated within a particular group (Cohen, 1991).

Despite the centrality of ~~identity~~ social position to questions of justice, Cohen (1991) argues that it has been largely ignored by psychologists. He states "If we wish to understand justice and the role it plays in social life, then understanding how we draw the boundaries of the 'moral community' within which all matters of justice are confronted is crucial.' (Cohen, 1991, p. 247). To this end, he argues, psychological researchers need to look beyond the individual as recipient, as most empirical research in this field does, and look towards other recipient units such as small or large groups. Relevant recipients may families, statistical aggregates (for example population groups), or self-conscious collectivities (such as gender or class groups). Even within groups of recipients, there may be other dimensions along which distributions differ. Status at birth, sex, ethnicity, age, religion, have all been used as a dimension against which people have been included or excluded from allocation decisions (Cohen, 1991).

Wenzel (2000) shares these concerns about the neglect of questions of ~~identity~~ social groups in relation to distributive justice. He argues that, in particular, early exchange theories and the resultant equity theories were individualistic, and they failed to look at the social dimension of distributive justice. Despite attempts by some theorists to account for social

context in their conceptualisation of distributive justice – for example Lerner (1977) distinguished between identity, unit, and non-unit relationships in which distributions occur, and Deutsch (1985) incorporated conceptions of personal orientations in relation to perceptions of justice - these accounts were used for taxonomic differentiations, and ~~identity~~ social position was never explicitly discussed in relation to justice judgements (Wenzel, 2000). Like Cohen (1991), Wenzel argues that identity processes are central to explorations of justice, as they are the basis of judgements about entitlement. Despite the neglect of this fundamental issue within the body of literature on distributive justice, Wenzel (2000) argues that in certain theories related to procedural justice, identity processes play a central role. In particular he refers to Lind and Tyler's (1988) Group Value model. As discussed in Chapter 2, this model asserts that instrumental concerns that maximise individual output are not the only motivation with regards to justice judgements. Instead relational concerns regarding group membership and status are viewed as being central to perceptions of fairness (Lind & Tyler, 1988). As such this model attempts to account for group membership ~~and social identity~~ as being directly related to questions of fairness, in a way that distributive theories of justice have not. Wenzel (2000) argues that a theory that clarifies the relationship between identity processes and distributive judgement is also needed. In this regard he argues that perceptions of entitlement, which are viewed as being central to distributive justice judgements, depend on the individual's sociocategorical structuring of the situation, as well as their corresponding self-categorisation or identity (Wenzel, 2000). When individuals judge their own entitlements, they do so on the basis of self-categorisation, in that they perceive themselves to be entitled to the same outcomes as those who they see as being psychologically equal to them (Wenzel, 2000). As such "Self-categorization and identification structure the comparative context and influence which comparisons will be made against which normative standards" (Wenzel, 2000, p. 160).

Justice Perceptions and Demographic Variables

As can be seen from this discussion, characteristics of the individual, particularly those that are markers of social ~~identity and social location~~position, emerge as being central to perceptions or experiences of justice. There are any number of dimensions along which one individual might differ from another – ranging from easily recognisable features such as race or gender, to the less directly observable factors such as domestic features (where you live, with whom etc), financial status, or job title. These variables are likely to play an important role in defining a person's experience, particularly within the South African context. In South Africa there have been a number of state policies based on race and gender. These range from policies of Apartheid, to the current Affirmative Action policy of the ANC government, and include matters related to the capacity of people of different races as well as woman, to live lives commensurate with other people in society. Such policies are not unique to South Africa, and are not confined to just race and gender. Retirement policies based on age, selection decisions based on level of education, and welfare policies based on level of income are all examples of how certain individual characteristics have the capacity to shape life experiences through broad social policy. At a more micro level, there are a range of policies that are also shaped by such characteristics. A bank's loan policy and terms based on income and type of occupation, a social club's membership policy based on social status, or school admission policy based on the area in which learners live are examples of this. As such it is clear that certain characteristics of the individual and their circumstances, can be central to questions of rights and distributions.

In addition to this, as argued by Sen (1999) these characteristics are also central to the capacity people have to use different distributions. For example employees of an

organisation who live in areas further away from the work site will spend more of their salary on transportation costs than those who live closer by. Similarly those employees with a larger number of dependants will have less disposable income than those with few or no dependants. It can be seen that these individual characteristics or descriptors are potentially a source of valuable insight into people's experiences of justice. Such variables are wide ranging, but they can be categorised under the heading of demographic variables - i.e. descriptive characteristics that differentiate one person or population from the next (Rouceck & Warren, 1968).

While such demographic data is used most predominantly to describe groups in order to map population trends, such information can potentially be used for more than just descriptive purposes. The importance of demographic variables as impacting on a range of events and experiences of people has been recognised by, among others, sociologists, economists, anthropologists, and psychologists. Within the field of Demography [the social science discipline concerned with the study of human populations (http://demography.anu.edu.au)] demographic variables have received extensive research attention. Demographic variables have been researched in relation to, among others, crime (South & Messner, 2000), health behaviour (Pol & Thomas, 2001), child development (Riordan & Shore, 1997), as well as psychiatric disorder (Krznaric, 1999). The importance of demographic variables in helping to understand patterns of behaviour and perceptions is unsurprising. Many societal allocation decisions are made on the basis of demography – marital status, number of children, age, race, gender, level of education, and health status are just some of the variables that may determine access to resources and conditions within a particular society. Resources would include things such as education, employment, housing, money, etc, while conditions could refer to prejudices, favourable treatment, inclusive/exclusive behaviours, respect, acknowledgement,

liberties etc. It can, therefore, be argued that demographic data is indicative of an individual's access to societal resources, and consequently their social position in society. This social position creates an access point to information, processes, and goods, and as such, is likely to influence one's attitudes to and perceptions of a range of related constructs, including, if not primarily, perceptions of fairness of that society. ~~Demographic variables can also be seen to be influential in determining particular conceptions of social identity.~~

While the relationship between ~~identity~~ social position and perceptions of justice has largely been neglected by researchers, some attention has been given to particular aspects of ~~identity~~demography, most notably that of gender. Gilligan (1982), a developmental psychologist, proposed a theory related to gender differences in moral reasoning and approaches to justice. This theory was based on what she argued to be inherent gender biases in Kholberg's (1976) cognitive-developmental stage theory of moral development. Following Piaget's (1932/1965) stage approach to the development of moral reasoning, Kholberg (1976) developed a model of moral reasoning that had justice at its pinnacle. He argued that the development of moral reasoning was based on six stages, which were grouped into three levels. These different levels were indicative of a changing relationship between the self and societies rules and expectations (Crandall, Tsang, Goldman, & Pennington, 1999). In the first level, the pre-conventional level, moral reasoning is based on the possibility of reward or punishment. In the second level, the conventional level, moral reasoning is based on the idea of membership of the society and doing what is best for relationships and that society. In the final stage, the postconventional level, laws and rules are understood to be about individuals, not vice-versa. Moral reasoning is thus based on notions of justice and individual rights (Kholberg, 1976). The stages were viewed as hierarchical, and early research indicated that the modal stage for females was 3, while for men it was 4 (Jaffee & Hyde, 2000). This, in

conjunction with the fact that Kholberg's model was derived from an all male sample, led many researchers to criticise it as being gender-biased (Jaffee & Hyde, 2000). Most noted of these critics was Gilligan (1982), who argued that the Kholberg's (1969, 1976, 1984) theory neglected to recognise a distinctively female mode of moral reasoning. Gilligan (1982) further argued that Kholberg defined moral reasoning in relation purely to what she termed a justice-concern. This justice-concern, the conventional basis for assessing moral reasoning, is concerned with principles of fairness, equity, and individualism. This orientation ignores what she terms a care-orientation, which is characterised by a focus on maintaining relationships, responding to the needs of others, and a responsibility not to cause hurt (Gilligan, 1982). Gilligan (1982) argued that while males and females may operate from either of these orientations, there was a fundamentally different approach to moral reasoning between the two genders - males predominantly used a justice-orientation, and females predominantly used a care-orientation. Gilligan (1982) argued that society imposes different expectations on men and women, and these different experiences affect one's propensity toward a moral orientation of care or justice (Gilligan, 1982). She states:

> The sex difference question, when framed in this way, does not carry the implication that one sex is morally superior, nor does it imply that moral behaviour is biologically determined. Instead, it draws attention to two perspectives on morality. To the extent that biological sex, psychology of gender, and the cultural norms and values that define masculine and feminine behaviour affect the experience of equality and attachment, these factors will presumably influence moral development (1982, p. 282).

As such Gilligan (1982) developed a theory of moral reasoning that argued for a broader conceptualisation of moral-reasoning – one that would encompass a 'care-orientation' as well as a 'justice-orientation' (Gilligan, 1982). This theory was based on the development of

a morality of care, and like Kholberg's (1969, 1976, 1984) theory, this reasoning moved through a number of stages – first from the bases of caring as a selfish concept, then as a way of conforming to society's expectations of female selflessness, and finally to care as a universal ethic expectations (Crandall, Tsang, Goldman, & Pennington, 1999). Gilligan argued that the ethic of care is a different construct to that of justice, and that a holistic view of moral development would need to encompass both constructs (1982).

This exchange between Gilligan (1982) and Kholberg (1984) resulted in a body of research that has the gender differences in reasoning about morality and justice at its core. A considerable amount of psychological research about justice and gender is based on exploring or validating the core arguments of Gilligan (1982). Results of such research are inconsistent. Some researchers have found evidence for Gilligan's claims (Gilligan & Attanuchi, 1988; Langdale, 1986; Johnston, 1988; Yacker & Weinberg, 1990). For example Wright and Galea (1998, in Galea & Wright, 1999) found support for the hypothesis that gender is related to how individuals evaluate the fairness of decisions in a workplace setting. They found that women and men judged the fairness of decisions differently, with women using a justice orientation more than men did. However, other studies have found no gender differences in moral reasoning at all (Beal, Garrod, Ruben & Stewart, 1997; Friedman, Robinson, & Friedman, 1987). Rest (1979) conducted a review of 17 different studies that looked at gender differences in moral reasoning. He found that there were only two significant gender differences, both of which favoured females. Walker (1984) conducted a meta-analysis of 79 studies that measured moral reasoning in relation to both justice and care components and that looked for gender differences in such reasoning. He found only limited evidence to support gender differences in moral reasoning – gender accounted for one twentieth of one percent of the variability of moral reasoning (Walker, 1984). Jaffee and

Hyde (2000) conducted a meta-analysis on 180 published articles and 66 dissertations looking at gender differences in moral reasoning. The analysis revealed small differences in care orientation in favour of females, and small differences in justice orientations favouring males.

Researchers working in the area of justice perceptions have also looked at gender as a variable potentially related to different aspects of justice. For example Jasso and Webster (1999) conducted a series of studies aimed at exploring gender differences in relation to purely distributive concerns. In one study they aimed to explore whether a double standard existed for the assessment of justice earnings between men and women – i.e. do observers treat men and women differently when asked to assign the amount of reward they consider just for a target recipient. Results, based on the use of vignettes, indicated that respondents regarded as just a 15 percent wage gap between men and women – men were systematically assigned higher wages than comparable women, both by male and female respondents.

Tata (2000) conducted a study aimed at exploring the influence of gender and organisational role on the use of distributive and procedural justice principles. In this study a sample of 44 men and 38 women graduate students employed in various business organisations were asked to assess how likely they would be to consider factors related to both procedural and distributive justice when making decisions related to pay raises. A self-report questionnaire was used, comprising six items aimed at measuring the use of distributive criteria and 10 items aimed at measuring the use of distributive criteria. These two measures were adapted from distributive and procedural organisational justice scales. Participants completed two versions of the questionnaire. In the first they were asked to imagine that they were a supervisor making a raise decision in relation to employees in their department. In the second

they were asked to imagine that they were an employee who had just received a pay raise. A biographic blank, where the sex of the participants was indicated, was completed. Results of a multivariate analysis of variance (where gender was a between-subjects factor, organisational role a within-subject factor and distributive and procedural justice were dependent variables) indicated that when assuming the role of subordinates participants were more likely to use distributive justice principles, procedural justice principles when assuming the role of supervisor, and that men were more likely to use distributive justice principles than procedural justice principles when allocating and evaluating pay raises. Women did not differ in their use of distributive and procedural principles.

Lee, Pillutla, and Law (2000) conducted a study aimed at exploring, among other things, whether gender moderates the relationship between distributive and procedural justice perceptions and evaluations of the organisation and management. A sample of 729 university employees completed a self report questionnaire – this comprised a procedural justice scale which was divided into a 6 item 'formal procedure' sub scale and a 9 item interpersonal justice sub scale, a 5 item distributive justice scale, as well as 3 item trust in management scale, and a 3 item psychological contract fulfilment scale used to measure organisational evaluation. Results of a hierarchical moderated regression indicated that while gender did moderate the relationship between procedural justice perceptions and organisational evaluations (the effect of procedural justice perceptions on organisational evaluations was milder for women than it was for men), it did not moderate any of the other three relationships hypothesised (i.e. procedural and distributive justice perceptions and trust in management, or distributive justice perceptions and organisational evaluation).

Gender has also been looked at in relation to belief in a just world - the belief that the world is a just place where people generally get what they deserve (Lerner, 1977) A number of studies have been conducted aimed at exploring whether there are gender differences in the belief in a just world, the results of which have been largely inconsistent. For example Furnham (1991) conducted a study on 1 659 psychology students from 12 different countries in which no gender differences in belief in a just world were found. Similar studies on a range of smaller samples also found no such gender differences (Smith & Green, 1984; Rubin & Peplau, 1975; Wagstaff, 1983; Ma & Smith, 1985, Durm & Stowers, 1998). However, Whatley (1993), Moran and Comfort (1982), and Ambrosia and Sheehan (1990) reported sex differences in just world beliefs. A meta-analytic review of the relationship between gender and belief in a just world was conducted by O'Connor, Morrison, mcLeod & Anderson (1996). The researchers conducted a search of a number of sources in order to identify studies that measured belief in a just world using two particular scales. A total of 63 studies were identified, but only 33 of those either reported, or the researchers provided, sufficient statistical information needed to calculate an effect size. The total sample comprised 3350 men and 4292 women. Results indicated that the weighted average effect size was .12 (1) ($p<.05$), suggesting that males had slightly higher just world beliefs than women. This is considered a small effect size, but the authors argue that the null hypothesis of no difference between men and women cannot be rejected.

As can be seen, years of psychological research into the relationship between gender and justice have produced inconsistent results. Lee, Pillutla, and Law, (2000, p. 699) state that social psychological research on gender differences in relation to perceptions of justice "…has a long and confusing history…" (and they acknowledge that their research results

also did not yield consistent gender effects). Similarly surprising results have been found when looking at race – a second demographic variable that has interested justice researchers.

Parker, Baltes and Christiansen (1997) conducted a study aimed at exploring whether race and gender moderate the relationship between perceptions of organisational justice and support for affirmative action. In this study 7 228 employees of a government agency in America completed a self-report questionnaire comprising, among others, measures of support for affirmative action as well as organisational and procedural justice perceptions. Overall the questionnaire comprised 120 items, but a sub set of 21 items – argued to represent the six constructs under discussion - were used in the statistical analysis. In relation to justice perceptions, 3 items focusing on the extent to which rewards and recognition were allocated on the basis of performance were used as indicators of distributive justice, and 4 items focusing on the extent to which participants felt involved in organisational decision making were used as indicators of procedural justice. Four race-gender groups were identified, namely white men, white women, Blacks/Hispanics, and Asians. These categories were arrived at on the basis of theoretical concerns (these groups represent previously disadvantaged groups in America) as well as statistical analyses –a LISREL analysis using only white women, black, Hispanic, and Asian participants was conducted in order to ascertain if there were differences between these groups on the variables under discussion. As there were no significant differences between blacks and Hispanics they were combined into one group in order to maximise the power of between-group comparisons. Similarly, no differences were found between women and Asians, but these two groups were left separate in order to increase the interpretability of the between-groups comparisons. Four demographic variables were included as control variables, namely age, education, level in the organisation, and tenure.

Mean and covariance structure analyses (MACS) were used to examine the relationships between support for affirmative action, justice perceptions, as well as the other variables under investigation (career development, satisfaction, and loyalty). MACS analysis comprises two steps – firstly the equivalency of the measurement properties of the constructs and the effects of the control variables across the four groups are tested. Secondly, on the basis of metric invariance, a test for group differences and construct relationships is conducted. Results indicated, among other things that mean levels of procedural and distributive justice were not reliably different across the four demographic groups. Further, group membership did moderate the relationship between support for affirmative action and perceptions of organisational justice, but not always in the direction that the researchers had predicted - despite predicting a negative relationship between these variables for white men, perceived support for affirmative action was positively correlated with organisational justice perceptions. These relationships were, however, stronger for the other three demographic groups. In addition to these results, it is interesting to note the relationships between justice perceptions and the control variables. Procedural justice was negatively related to level of education, and positively related to level in the organisation. Similarly, distributive justice was negatively related to level of education, and positively related to level in the organisation, as well as being negatively related to tenure.

While these are only some of the results, as the study had a number of different foci not relevant to the current discussion, it is evident that the demographic variables are not significant in the way that researchers might predict – there were no reliable differences between the four groups with regards to perceptions of organisational justice, the higher the level of education the lower perceptions of justice were, as tenure increased perceptions of

distributive justice decreased, white men did not perceive the organisation to be unfair despite perceiving high support for affirmative action. This might partly be explained by looking at the research design and methodology. Given the nature of the research questions, how race and gender groups are defined may be considered fundamental. Despite this, the grouping of participants into the four demographic categories is arguable problematic. Firstly the researchers only defined gender differences in the white population group. As such they are assuming that gender is less relevant for the other groupings as, presumably the supposition is, that discrimination occurred against these groups on the basis of race and not gender. There is no evidence to presuppose that black or Hispanic women feel the same as black or Hispanic men about affirmative action or experiences of justice. To the contrary – if you are exploring the relationship between race and gender and other variables it might arguably be very important to explore gender differences within the race groups. Black women, for example, might arguably have suffered a double oppression, and this might impact quite heavily on their perceptions and experiences. It is not really possible to have a meaningful discussion about gender differences if these are only identified for one race group. A second concern about how the demographic groups were identified refers to the way in which Black and Hispanic groups were combined as initial statistics indicated no differences between these two groups on the variables under consideration. A finding of no differences between these two groups could be considered an interesting finding on its own, and worthy of discussion and further investigation. There is no theoretical evidence to suggest that these groups are similar or that they share the same experiences of discrimination simply because they are both minority groups. As such combining the two groups might arguably be misleading in that it creates one large group of people, thereby impacting on statistical procedures, without any theoretical or even intuitive support for doing so. Furthermore, it reduces the amount of detail and complexity in the investigation,

fusing two sets of diverse groups together and representing their experiences and perceptions as the same (which is different from saying that there was no difference between the two groups in relation to particular measures). Again, if the purpose of the study is to explore race differences, then proper cognisance needs to be given to the different race groups. The research results may have been unpredictable and inconsistent partly because the four demographic groups identified might not be congruent with people's actual experiences of their race and gender.

A second concern about this study that might help account for the surprising results is the measures of organisational justice used. As reported, initially 120 items were included in the questionnaire but these were reduced to 21 for the analyses. Three items were used to measure distributive justice, which was defined in relation tot reward and recognition for performance, and another three for procedural justice which was defined in relation to involvement in decision making. As can be seen from discussions in the previous two chapters, this is not reflective of the extent of thinking and work done in the conceptualisation of these variables. Neither of these two definitions and measures could necessarily be said to be measures of organisational justice. As such it might be unsurprising that the differences between the groups were not as significant as expected by the researchers.

A final concern about this study relates to the value of looking for race and gender differences in isolation from a range of other demographic variables that may be considered as important. While it is acknowledged that this particular study was exploring questions about affirmative action and justice, and affirmative action is a gendered and race based policy, it is arguably slightly reductionist to suppose that these two demographic variables on

their own would have a large impact on perceptions. For example it could be argued that variables such as class, education, marital status, parents occupation, whether or not one is unionised could, in combination, be as important as race and gender in predicting people's experiences of affirmative action and organisational justice. Factors such as whether someone is likely to find it easier to obtain work (e.g. more educated), relies on their income, and thus their job, less than others (e.g. someone who has a n income earning spouse, someone with no children), or who is less threatened in their job (e.g. someone lower down on the organisational hierarchy) might have as strong an influence as, or might interact with, race and gender in explaining feelings about organisational fairness and affirmative action. This was indicative even in this study, when looking at the significant relationship between the control variables and perceptions of justice. Race and gender do not operate in isolation from other demographic variables, and as such a research design that incorporates some of that complexity into its design might produce results that are more meaningful.

Similar concerns are echoed in several other studies. For example Calhoun and Cann (1994) looked at racial differences in belief in a just world. One hundred and forty undergraduate students at a university in America completed a self-report questionnaire comprising a belief in a just world scale as well as a Worlds Assumption Scale. Of these 140 participants 65 were black, 73 were white, and 6 were members of other minority groups such as Hispanic or Asian. Results indicated differences between black and white respondents, with white Americans viewing their personal worlds as being more just than the world in general, and black respondents seeing the world in general as being less just. This type of study raises similar concerns to the study described above – race categories cannot be considered encompassing (a number of race groups were not represented sufficiently or at all) the researchers still managed to perform, race is looked at in isolation from other variables, and

measures may be considered somewhat reductionist. In addition to this, the study eliminates differences between subjects by summing the scales in order to get a single index for the variable under investigation. As such people who answered the set of questions very differently might end up with the identical total score, and as such in the results would be considered to hold the same perceptions of justice. As discussed in this, and the previous two chapters, using a student sample is also not ideal, particularly for studies of this nature. The fact that these people are studying in a university arguably means that their circumstances are somewhat better off than people who cannot afford university or who were not eligible for university entrance. As such this sample will, for the most part, represent populations (both black and white) who have access to resources that many Americans do not. When looking at questions of justice, this can be seen to be a very important bias. A sample that encompassed people from a range of different contexts might have been more appropriate.

A few studies have tried to account for some of the complexity of demographic variables in the exploration of aspects of justice. Hunt (2000) conducted a study in order to explore whether race, gender, social economic status, age and religious affiliation shape beliefs in a just world. Two thousand eight hundred and fifty four interviews were conducted with residents of several counties in southern California. Of this sample 1 245 were whites, 737 Hispanic, 646 black, 148 were Asians, and 62 were categorised other. The Asian category was very culturally heterogeneous (comprising Japanese, Chinese, Koreans, Vietnamese, Filipinos and Indians, among others) and as such was eliminated from the study, as was the 'other' group. As black respondents were over represented in the sample, a weighting correction was used to adjust the sample to reflect existing population proportions. The other independent demographic variables were measured as follows: socio-economic status was measured using a combination of personal income (comprising ten categories) and years of

education (also comprising ten categories). These were then combined into a 10-point scale with one index of socio-economic status. Age was measured in years, and religion in relation to three affiliations – catholic, protestant, and no affiliation. An additional measure of church attendance, comprising two categories (never or once a week or more) was included as a measure of religiosity. Gender was measured using a male or female category. The dependent variable, belief in a just world, was measured using four items extracted, through factor analysis, from a larger scale developed by Rubin and Peplau (1975). This sub scale had a reported alpha of .52. Descriptive and regression statistics were used to analyse the data. Results indicated significant differences between race groups regarding belief in a just world (Hispanics reporting the highest belief in a just world and black respondents the least), as well as between men and women (with men having a higher belief in a just world than women) and lower socio-economic groups reporting a stronger belief in a just world than the higher socio-economic group. Further there were no significant differences between religious affiliation and those attending church or not.

While this study does indicate an attempt to incorporate more than just race or gender into an understanding of how justice beliefs are shaped, it raises a number of methodological and conceptual concerns. Firstly the way in which the demographic variables were measured could be considered extremely flawed in that they were reductionist and closed off legitimate options. Socio-economic status was measured using a personal index income as well as an index of the number of years of education. These were then combined into one index. Such a measure can in fact be very misleading. Income can only be looked at in relation to other variables. Someone earning $1000 a month who has no children or spouse might have a very different financial status from someone who earns $2000 a month but who has four children to support and educate as well as an unemployed spouse. Alternatively two people who earn

$1000 a month might differ in socio-economic status in that one has a spouse who earns $10000 a month and the other has no income-producing spouse. As such personal income is an insufficient measure of socio-economic status. Similar concerns are raised with using number of years of education as an indicator. Firstly the number of years that one has been receiving education is reflective of an input rather than an outcome – someone could have spent three years at university but fail to obtain a degree, or could have done a degree part time and thus taken twice as long to obtain a degree as a full-time student. Secondly there is no explanation given as to why education is such a fundamental indicator of socio-economic status. Neighbourhood, job title, house ownership or a range of other variables could arguably be as good, or even better, indicators of this variable. Finally the way in which these two variables were then combined is not explained e.g. were they weighted the same?

Similar problems are evident with the measurement of religious affiliation and religiosity. Respondents were given the option of catholic, protestant, or no affiliation. This implies that if someone is not Catholic or Protestant then they have no religious affiliation (in fact this group is referred to as the 'no religion' group in the study), thereby excluding a range of other religions, some outside of Christianity such as Islam or Judaism, and other sub groups within Christianity. While the researcher does explain his choice of these two overarching Christian affiliations, he does not address the matter of respondents who may not be Christian but who do have other religious affiliations. Religiosity is also measured by one index – that of church attendance. Only two options are provided here, the first category being those who do not attend church at all, and the second for those who go once a week or more. This raises two concerns. Firstly religiosity cannot be measured by church attendance alone. There are a number of other activities such as community outreach, religious reading, and prayer and fellowship groups that are important measures of religiosity. Someone might

not attend church regularly, but might be very involved in a religious community and have very strong religious beliefs. Secondly a two point measure such as this one eliminates all the variance between never going to church and going one a week or more. Some people might go to church on all religious holidays but at no other time, while someone going to church everyday may not be comparable to a person who is forced by his/her spouse to go once a week. Some people might want to go to church more often than they do but are unable to for logistical or health reasons. As such this dichotomous measure of church attendance might not tell one very much about religiosity at all.

Finally, with regards to race respondents were categorised as black, white, or Hispanic. The Asian category was omitted given the vast hetrogenities found in that grouping. While it is arguably preferable to exclude this group than present it as a homogenous grouping, this, along with the 60 respondents categorised as other point to an important consideration – three race groups are not sufficient to capture the actual complexity of this social world. While these people only account for 210 participants out of the entire sample of 2 854, if the main thrust of your research efforts are to explore race differences in justice perceptions, it is arguably not appropriate to simply eliminate minority groupings. These people could be a very important source of interesting information about race differences and justice, particularly because theirs is a voice that is seldom represented in studies of this nature. While whites, blacks and Hispanics undoubtedly represent the three major race groups in America as is argued by the researcher, this is not sufficient theoretical evidence to eliminate them from the study.

With regards to the measurement of the dependent variable, belief in a just world, four items out of a longer 20-item scale. This was done on the basis of a factor analysis for which no

details were provided. The author states that this four-item sub scale represents the maximum possible reliability (it has an alpha of .52). This raises two concerns – firstly in relation to the reliability of the scale as a whole as well as the sub scale, and secondly in relation to the extent to which this measure can be said to represent beliefs in a just world. It is not clear why there was a need to reduce the number of items measuring belief in a just world. This could perhaps have been done because of a very low alpha for the total scale (evidenced on the low alpha reported for the sub scale, which was the most reliable configuration to emerge). It seems that it would not be desirable or necessary to diminish and over simplify the belief in a just world construct in this way. The author has not provided sufficient information for the rationale behind this process, and it is therefore difficult to assess. However, it is clear that four items cannot be considered to be an extensive or comprehensive measure of the dependent variable. Further to this an alpha of .60 or higher is the conservative level considered acceptable for determining reliability of a measure in social science research (McKennell, 1970). Other statisticians maintain that 0.70 is a more acceptable cut off point (Kerlinger, 1986). As such it is clear that the sub scale cannot be considered a reliable measure. This is highly problematic given the centrality of the belief in a just world construct for this study.

The final concern related to this study is the methods of analysis used. Essentially each demographic variable was looked at independently, with only race being looked at in relation to gender, socio-economic, age, and race sub groups. While this is an improvement on studies that do not account for any demographic differences within race or gender groups, as described earlier in this chapter, it is important to begin looking at the interactions between a range of demographic variables. This would arguably be more closely indicative of the real world complexities linked to ~~identity~~social position and self-categorisation.

These concerns are not unique to this particular study. Other studies looking at belief in a just world and demographic variables have used similar measures, particularly of the demographic variables. For example Umberson (1993) conducted a study that looked at socio-economic status (defined in relation to education and income) and race (using two categories, that of black and white) in relation to beliefs in a just world. Results indicated that people with a lower socio-economic status and black respondents had a higher belief in a just world than the white and higher socio-economic subjects. Similarly Benson (1992) conducted a study using a sample of 283 people from Northern Ireland aimed at exploring the relationship between age, education, income and gender. Results indicated that age was the only variable that significantly predicted belief in a just world.

In attempting to explore the relationship between religiosity and beliefs in a just world more closely, Crozier and Joseph (1997) conducted a study using a sample of 143 students between the ages of 16 and 18. Participants completed a questionnaire that comprised three scales. The first was a belief in a just world scale developed by Furnham and Proctor (1992). This scale divided up just world beliefs into three spheres namely personal just world beliefs, interpersonal just world beliefs, and socio political just world beliefs. The scale thus yields three sub scale scores, each based on the summing of scores across 10 items. The second scale was a global just world beliefs scale comprising 7 items, and the third scale was an Attitudes towards Christianity scale developed by Francis and comprising 24 items (1992). Results of a regression analysis showed no association between religiosity and global beliefs in a just world, socio political just world beliefs, or interpersonal just world beliefs. Religiosity was associated with personal just world beliefs.

While this study does share some of the limitations of other studies discussed in this chapter (such as using a student and using scales that are additive and ultimately use one index of a variable) the researchers did look more closely at the variables under investigation and defined them in ways that do account for more complexity. However, the sample was very homogenous being English students, all between the ages of 16 and 18, and presumably were all Christian (given the orientation of the religiosity measure). In addition of the 143 participants, 112 were boys and only 31 were girls. As such the generalisability of these findings is limited.

As can be seen from the above discussion race, gender and religious affiliation/religiosity have all been looked at in relation to perceptions and experiences of justice. A fourth demographic variable that has received considerable attention is that of nationality. As discussed in Chapter 3, researchers looking at culture and justice have often done so purely in relation to nationality. For example Lind, Tyler & Huo (1997) conducted two studies that aimed to test the generalisability of antecedents of procedural justice perceptions across culture. The sample for the first study comprised 309 students from an American university, 216 from a German university, and 204 students from a Hong Kong university. In this study culture was equated with the nationality of the subject. Participants were asked to recall a dispute they had had with someone and then to answer eight questions about the dispute as well as rate a list of seven dispute resolution options. After doing this students completed six measures, all related to different aspects of procedural justice, as well as four questions related to beliefs about power distance and hierarchy. This last measure was included in order to test assumptions about the cultural differences between the three groups, and is based on one of Hofstede's four cultural dimensions. Initial findings indicated that the three sites did differ significantly regarding beliefs about power-distance, proving, according to

the authors, the assumptions about cultural contrasts between the three nationality groups. Despite this, results of a regression analysis indicated no significant interactions between nationality and antecedants of procedural justice.

The second study comprised a sample of 181 and 164 students from universities in America and Japan respectively. Students were given a vignette in which a hypothetical dispute was described. Eight different versions of this dispute were used, where three experimental variables were manipulated – the relationship between the participant and the other person in the dispute, similarity of background, and the nature of the disputed issue. Participants were then given a list of various dispute resolution methods and a scale asking them to rate each of the methods on the basis of a number of different dimensions, as well as the likelihood of their using that procedure. The analyses conducted only took into account four of the dispute resolution procedures, that of negotiation, persuasion, arbitration and mediation, as the authors argued that they were the most relevant to their hypotheses. Further to this they stated that the other options (social influence, ignoring, and giving in) were not rated as options that the participants were likely to use. As such they were dropped from the analyses. In addition to the three manipulated between subjects variables described above as well as the manipulated within-subject variables of the different resolution procedures, gender and culture were included in the model. Similar to the first study, participants completed a power-distance scale in order to determine whether American and Japanese students, as well as men and women, differed significantly on this measure of culture. The preliminary analyses of this scale indicated significant differences between nationality and the power distance items, but no such differences between male and female participants. Given these results the researchers felt that assumptions about cultural differences between the two groups had been supported, and further analyses were then done. An analysis of

variance (ANOVA), the statistical technique used to test for a significant difference between mean scores of the dependant variable of a number of groups by comparing the variability between the groups against the variability within the groups, was used. Results indicated a culture X gender effect, which was due to a difference in the American sample, where women tended to see all of the procedures as fairer than men. Results of a regression analysis showed one significant interaction involving culture – American participants placed greater emphasis on status recognition than their Japanese counterparts. The authors argue that despite this finding evidence indicates " …that procedural justice is defined in much the same way across widely different cultural contexts" (Lind, Tyler, and Huo, 1997, p. 777).

While the researchers were purporting to be exploring culture, it is clear that in fact they were looking at nationality - despite the fact that the different nationality groups scored significantly differently on Hofstede's power distance scale. Aside from the concerns about this model of culture already discussed in Chapter 3, which criticises Hofstede's model as being reductionist as well as insensitive to diversity of culture within groups, the use of this model in this study raises further concerns. The authors reduce Hofstede's model even further by looking at only one of the culture dimensions, that of power-distance. They then use four items in order to measure this dimension. These items include the following statements: "It is best for our society to let the elites decide what is good for us", "If followers trust their leaders wholeheartedly, the group will be most successful", "Conflict among people is minimised if everyone has equal rights in society", "An organisation is most successful if it is clear who is the leader and who is the follower". Clearly these items are trying to assess some perception of power and hierarchy, but they are arguably very broad statements that tend towards ambiguity. For example a person may be unlikely to know what is meant by elites – is it the people voted into power or the people who hold

public office, the wealthy in society, or the educated? There is also an assumption that there is such a thing as an elite, when in fact the respondent might not think that there is. Further it does not specify which society. For example one of the groups came from the Chinese University in Hong Kong, before the hand over of Hong Kong to China. It is not clear which society they might then be referring to – is the Hong Kong society, with the elites in China, or the Chinese society with elites in China, or the Hong Kong society with elites in Hong Kong? Given the political context of this sample, this question might have been quite a loaded one. Other groups might also have been responding to different ideas of society. The sample comprised university students, who might then have been thinking about their university community, or some American participants might have thought about their particular state while others thought about the United States in general. Similarly, in the second question subjects might have considered different leaders and responded accordingly – it might be thought best to follow a religious leader or your manager, but not necessarily your political leaders. The next statement - "Conflict among people is minimised if everyone has equal rights in society" – also raises concerns in that, presumably, high agreement with this statement means a preference for hierarchical relations. This could possibly be misleading. There might in fact be more conflict in societies where there are equal rights as people are freer to disagree and express their disagreement, where in societies where there are not equal rights people might be more submissive and compliant out of fear. It is thus not clear that these statements are a valid measure of power-distance and preference for hierarchy, or that they are measuring aspects of culture. Finally, the last statement, "An organisation is most successful if it is clear who is the leader and who is the follower", is also problematic. Firstly, it moves the context of the questions into the organisation, where culture arguably manifests differently. Notions of organisational culture are different to that of broader notions of culture, and things that are found to be acceptable

in organisations might not be in other contexts. Hierarchy is perhaps the most noticeable of such things – the distribution of decision making power and status along stratified levels is a very common organisational practice, and 'flattened' organisations that do not use such a arrangement are few and far between. There may, therefore, be a lot of people who might support hierarchical relationships within an organisation but who would not in many other contexts. Once again this item might be an indicator of organisational culture, but not of culture in other broader contexts. Given all of these concerns, even though differences between the different nationalities were found on this scale, it is not necessarily convincing that nationality can be taken to be a signifier of culture.

There are a number of other studies that look at nationality, some as a signifier of culture, others as a variable in and of itself (Sun, 2001; Lam, Schaubroeck, Aryee, 2002; Blader, Chang, & Tyler, 2001; Au, Hui, & Leung, 2002; Rahim, Magner, Antonioni & Rahman, 2001; Pillai, Williams, & Tan, 2001). Many of these studies have found no differences between different nationality groups on a number of the relationships tested. For example Pillai, Williams, & Tan (2001) explored the relationship between procedural and distributive justice and supervisory trust, job-satisfaction , and organisational commitment, doing a comparison between samples of Indian, German and Chinese employees. Organisational justice perceptions were found to be an important predictor of trust in supervisors across all three samples. Similarly Rahim, Magner, Antonioni and Rahman (2001) conducted a study in order to explore differences in reactions to organisational justice between a sample of 302 Americans and 299 Bangladeshis. Results indicated that all three dimensions of organisational justice perceptions were related to intention to turnover and organisational commitment. Other studies, however, have found significant differences between nationality groups. For example Blader, Chang, & Tyler (2001) compared the role of procedural justice

in motivating organisational retaliatory behaviours between a sample of 260 American and 181 Taiwanese employees. Results indicated that procedural justice concerns were less predictive of retaliatory behaviours among the Taiwanese sample. Further, Taiwanese respondents considered relational and instrumental concerns equally when making a procedural justice judgement, while American participants considered relational concerns more predominantly.

As with a range of other demographic variables explored, inconsistent results are perhaps unsurprising. Often inadequate consideration and account is given for why differences between the selected nationality groups should be expected, and when it is, it is done in relation to Hofstede's limited cultural model, usually in relation to one or two specific dimensions. As such the comparison groups appear slightly random, with no systematic rationale and trajectory underlying the studies. Further, nationality is also looked at in isolation from other variables that may be as important to consider, particularly in relation to nationality and culture. For example age and gender might impact on views of culture – women might experience a national culture differently from men, older people differently from younger ones. As discussed in this and the previous chapters, these concerns are not isolated, but rather form an underlying flaw in the justice literature.

Concluding Remarks

As can be seen from the above discussion, a range of different demographic variables have been explored in relation to perceptions of justice. Despite the importance of concerns about ~~identity~~social position in relation to experiences and perceptions of justice~~, as well as the significance of demographic variables as indicators of social and group identity~~, these

matters have received sporadic and superficial attention from justice researchers. There are some clear indicators in the research of the importance of demographic variables for perceptions of justice. This is, however, as evidenced by the review of research, overshadowed by some conceptual and methodological limitations that constrain the usefulness of this research.

The first limitation pertains to the way in which researchers define and measure both the demographic variables under investigation as well as perceptions of justice – these definitions are perhaps not always as considered as they should be, nor are they consistent across the body of research. For example, with regards to defining and operationalising demographic variables, it is arguably insufficient to measure socio-economic using income and education, erroneous to equate nationality with culture, and problematic to combine race groups with little intuitive or theoretical foundations. The way in which demographic variables are measured is often needlessly reductionist, perhaps in an attempt to limit the number of categories in order to make certain statistical procedures possible. There also seems to be very little agreement and consistency over how perceptions of justice are measured. Arguments about the dimensionality of justice (as discussed in Chapter 3) have led to some researchers defining procedural justice as comprising notions of interpersonal justice, while others do not. Some researchers define procedural justice in relation to process and decision control, others in relation to Leventhal's (1980) six criteria. Further, distributive justice is sometimes defined in relation to questions about equity, while at other times questions about equality and need are incorporated. As such it is not possible to say that the range of studies discussed are actually talking about the same concepts, making it difficult to see how these studies articulate with one another. It is clear that any attempt to explore the relationship between demographic variables and perceptions of justice needs to

consider more carefully how the variables under investigation are defined, as well as to measure these in a more heeded and in depth way.

A second limitation of this research is that it has, for the most part, tended isolate one such characteristic, such as gender, race or nationality. As discussed before, these research results are, perhaps unsurprisingly, inconsistent. A poor black woman, for instance, may differ considerably from a rich white woman, a married man with four children from a single man with no children. No attention has been given to the differences that exist within these broad demographic categorisations, nor to the way in which demographic variables interact with one another. For example given the strong correlation between race and class, a study that looks at race on its own might, in fact, be picking up on socio-economic factors. Results are interpreted in the light of race, when this might actually be misleading. If demographic variables are going to be the focus of a research question, meaningful results can only be obtained by looking at a myriad of characteristics with appropriate statistical procedures – procedures that can account for interactions between a host of different variables and that does not rely on the reduction of data to a limited number of categories. Further to this, it is clear that only a limited number of demographic variables have been looked at in relation to perceptions of justice. While race, gender, religion and nationality are all important and informative characteristics, there may be a host of other such variables that can provide important insight into the area. Organisational variables (such as tenure, union membership, job title, number of promotions in the organisation, length of tenure in one's current position), domestic indicators (such as marital status, number of children, how many people one lives with, where one lives) and socio-economic variables (such as income, number of dependants, whether one owns one's house) as well as a range of other characteristics could all provide valuable information about experiences of justice.

Finally, a third limitation of this research – one that has been echoed in research described in Chapters 2 and 3 - relates to the homogenous nature of the samples used. A considerable number of the studies described use university students as participants. This means that the majority of participants are from a very limited age range, are often predominantly white (unless it is race that is specifically under investigation), and reflect a particular socio-economic group. These students have also often had no experience of full time employment, and many are not self-supporting. As such this restricts their experiences of justice to those encountered at home, socially, or at university. While this is something that has been noted about many studies conducted in the area of justice, it is perhaps particularly problematic in studies aimed at exploring demographic variables. Homogenous samples might produce results that are misleading in that there might be a host of other factors that are resulting in shared perceptions of justice. For example it might be unremarkable to find no differences between men and women on a sample of predominantly white, young adults attending a particular university – such participants are likely to have a tremendous amount in common, such as socio-economic status, level of education, age, perhaps even political views (particularly if the university is politically aligned). While researchers would interpret a no difference finding as meaning men and women experience justice similarly, the other demographic variables that this sample have in common might be more salient. More importantly, however, is that studies with this kind of sample have very little external validity – results cannot convincingly be generalised to other population groups.

It is clear that demographic variables are important indicators of ~~social and~~ group identity, and that such variables locate people within the social and political context of their society. Being a woman, or black, young, or rich all have meanings that extend beyond simple

identifiers, and these meanings become particularly important when considering questions about justice. Theorists have argued that this social position, one that comprises a myriad of demographic variables, is crucial to understanding questions about justice. Finding ways of exploring this relationship while attempting to account for the complexity of these variables is thus fundamental. This forms the basis for the current study, which aims to explore the extent to which a range of demographic variables predict perceptions of social and organisational justice.

Chapter 5: Rationale and Procedure

Overview

In the first half of this report the theoretical and conceptual background for this study was articulated and a number of key arguments that lay the foundation for the current study presented. In this chapter these arguments will be revisited as a prelude to a discussion of the aims and rationale of the current study. As pointed out in the introduction, while the summary of these arguments will undoubtedly be repetitive, it is intended for ease of reference to the reader who has already passed through approximately 150 pages of discussion.

As will be outlined in this discussion, the literature and research review presented in the first half of this chapter present two sets of challenges – the first relates to theoretical questions that beg investigation and thus have bearing on the research questions, while the second concerns the methodological approach to be adopted, with particular reference to the definition and measurement of variables as well as the statistical analyses used. As such this chapter is divided into four main sections. The first section provides an overview of the arguments made in the preceding chapters, and outlines the rationale for the current study. This section ends with the presentation of the research questions that have emerged from these arguments.

The second section provides an overview of the methodological concerns that have influenced the current study, and begins a discussion about the approach to be adopted.

This section focuses more specifically on the research design and the nature of the sample, and provides information about procedures used, as well as biographical information on participating subjects. The third and fourth sections address two particular issues that have emerged as central methodological concerns, that is the definition and measurement of the variables under investigation, and the statistical analyses used.

The third section thus addresses the matter of variable definition and measurement, and looks individually at each variable under investigation, starting with demographic variables and moving on to social and organisational justice perceptions. Information about the psychometric properties of scales being used is provided. In addition to this information is provided about the development and validation of a new organisational justice perceptions measure. Details about the pilot study, including information about the sample, procedures used, statistical analyses and results are presented.

Finally, the fourth section details the statistical analyses to be conducted in light of the methodological concerns raised in the first half of the report. Information is provided about the tools used for all preliminary analyses including statistics used for the assessment of reliability and validity of the measuring instruments (Cronbachs Alpha and factor analysis) as well as the exploration and description of the data set (including distribution analyses, and descriptive statistics such as means, frequencies and percentages). Following this, an in depth discussion is presented on two statistical procedures to be used in answering the main research questions; namely cluster analysis and CHAID.

This chapter thus aims to refamiliarise the reader with the key arguments presented in the first half of the report and to describe ways in which the concerns raised will be addressed through the current study.

Rationale for the Current Study

In the first half of this report four key arguments were made which provide the point of departure for the current study. The first argument, discussed in Chapter two, pertained to the limited value of the tripartite framework used by social psychologists for understanding questions about justice. The second argument, discussed both in chapters two and three, related to limitations of the methodological underpinnings of research conducted in this area. The third argument, discussed in Chapter three, concerns itself with the distinction made by researchers between organisational and other types of justice. Finally, the last argument refers to a more specific question, that of the relationship between demographic variables and perceptions of justice. Each of these arguments forms a point of departure for the current study, and will be reviewed in the following paragraphs.

Chapter two provided an overview of the area of social justice, looking at how justice has been theorised and researched over the last fifty years. This chapter raised two primary concerns, that of the almost exclusive use of the tripartite model, as well as the methodological underpinnings of research conducted in the area. Through the review of justice literature, the tripartite or three-factor model most commonly used as a framework

for investigation by social psychologists was described – this model comprises distributive justice concerns which focus on the perceived fairness of outcomes, procedural justice concerns, which focus on the way in which outcome decisions are made, and interpersonal justice perceptions which are understood to refer to the quality of treatment received from decision-makers. Justice perceptions are thus accounted for by these three dimensions, and it is this model that is used as the foundation for the vast majority of research taking place in the area of justice. In the course of Chapter two it was argued that there seems to have been an over emphasis on this three-factor model, and that this framework presents some concerns that may serve to limit research in the area.

The first concern that was presented refers to the extent to which this model represents actual thinking about and experiences of justice. While the model has been useful particularly when exploring decisions that have emerged from clear procedures - where procedures and outcomes are distinct from one another, and where the procedure exists as a formal, observable means of reaching an outcome – it is argued that there are, however, many instances where people may not be able to, or wouldn't naturally, make distinctions between these three dimensions of justice. Given the complexity of justice concerns, many outcome decisions that do not lend themselves to a neat dissection into procedural, interpersonal, and distributive concerns. Where the extraction of information about justice perceptions would be facilitated by an *a priori* categorisation of these perceptions, the use of these three dimensions might be valuable. However, imposing this when there is no need to do so might serve to force justice perceptions into the tripartite theoretical framework.

A second concern about this model discussed in Chapter two, refers to the extent to which the tripartite justice model relies on the notion of a centralised body of resources with a limited number of people having authority over how those resources get distributed. Once again there is a concern that such a conceptualisation may not always accurately reflect the real world complexities of resource ownership and allocation. As pointed out Chapter three, Nozick (1974) argues that there is no such thing as a central distribution where one individual or group has the right to control all resources, but rather the total result of distributions in a society is in fact the product of numerous individual decisions (Nozick, 1974). Within the tripartite model it is assumed that there is a clear distinction between those who possess a set of resources and who thus are the decision-makers, and those who are subject to their authority. While there may be instances where this distinction is clear (particularly in the organisational setting) this understanding of justice is arguably overly linear and reductionist, failing to account for the more complicated ways in which resources are held, allocations made, and the ways in which people think about them.

Finally, the almost exclusive use of this a priori framework to explore questions about justice poses the danger that the research might become tautological – people are asked questions about justice with reference to these three dimensions, and their responses are then taken to be proof that these dimensions exist. There is, therefore, a danger that the responses being received are confirming a particular line of thought simply because of the way in which the questions are being asked. As such when research is conducted, it is on the basis of a framework that directs research and responses in a particular direction. This

arguably results in a body of research that becomes ossified and unable to move beyond this one paradigm. Again while this framework may be valuable in exploring particular questions about justice, it perhaps only offer a view of part of the picture, and as such present only a limited understanding of justice perceptions. It is thus arguably important to use alternate points of departure for the study of justice, ones that do not assume the structure of justice perceptions.

Despite such concerns about the tripartite model, it forms the basis of almost all psychological research being conducted in the area of justice. All of the validated scales used to do quantitative studies in this area are based on this tripartite framework – questions are asked about distributions, procedures, and interpersonal treatment, and then are often summed in order to obtain an overall justice score, or individual sub scale scores. This leads to the second argument articulated in the theoretical section, that is the problematic methodological underpinnings of much of the research in this area. Such concerns relate to a reliance on an experimental research paradigm, the nature of research samples, as well as the reductionistic nature of many of the data collection and analysis tools used.

As discussed in Chapter two, the psychological approach to research and knowledge generation is primarily empirical in nature, with much of the foundation of social psychological theories having their roots in an experimental research paradigm. While it is argued that a considerable amount of field research is conducted in the exploration of justice perceptions (Cropanzano, 2001), it is evident that a significant amount of research

is still conducted within the laboratory setting, posing some important limitations. The experimental paradigm observes people's reactions to situations that are removed from actual events or experiences – it is argued that the greatest weakness of this paradigm is its artificiality and as such the external validity of results emanating from such research is weak (Babbie, 1998). In such studies it is the researcher that is defining the parameters of the 'just' or 'unjust' situation, rather than people's actual experiences. As such it is not always clear that experimental research results reflect real life, or whether such studies are possibly confirming the a priori framework imposed by researchers.

The second methodological concern relates to the nature of the samples upon which the research is being conducted. Many of the samples are, as mentioned previously, student samples, and are fairly homogenous with regards to demographic composition – they will be reflective of the university going population in America, most of whom are white, of a very limited age range, and who come from middle class backgrounds. This has serious implications for the validity of research findings, as such samples cannot be said to be representative of larger population groups. Instead they represent a very small component of the population, a group who is likely to have had very different experiences of access to resources from many other groups, and as such very different experiences of justice. This has implications for the body of research and knowledge that has derived from the many studies that use such samples – it is reflective of a very limited set of experiences and cannot be taken to be of equal significance for other population groups. While this is arguably a criticism that could be levelled at most research, as findings based on any specific sample is not easily generalised to different population groups, this is particularly

problematic within justice research for two reasons. Firstly, as can be seen American student samples are regularly used and as such a large part of the body of knowledge that comprises the area of justice has systematically been built on the basis of this restricted group. Secondly given that justice concerns itself with questions about resource distribution, it is arguably even more important that such research make use of diverse samples –it is clear that different groups are likely to have very different experiences and perceptions of justice. It is perhaps particularly problematic to confine research to a group of people who already have access to many of societies scarce resources. Despite the implications that the dependence on student samples has, little meaningful attention is paid to the limitations this presents to the research outcomes.

The final methodological concern highlighted in chapters two and three relates to the tendency to reduce very complex issues into 'variables', which are then measured by a very limited set of questions and taken to accurately represent the whole of that experience. As mentioned earlier a considerable amount of quantitative research is based on the use of justice scales that reduce measurement of justice perceptions into the three subscales. These measures then further reduce such perceptions by adding up the scores for each question in order to produce one index of justice perceptions. As such not only are perceptions of justice already being limited to the three types identified by researchers, but the complexities involved within each of these dimensions as well as the differences between people are being diminished. Further to this, the statistical tools used to analyse this data rely on the reduction of variables into limited categories and indices. ANOVAs, T-tests, multiple regressions, correlations, MANOVAs as well as many other uni and multivariate statistical

procedures cannot incorporate an indefinite number of categories and variations into their calculations. As such researchers are required to reduce data in accordance with the procedures used. If thinking about justice is to become more systemic and nuanced as is argued for in chapters two and three, research methodologies that extend beyond linear thinking will be needed. The recognition of complexity requires a move away from trying to simplify or reduce variables into measurable units, and a need to use methodologies that can account for and help explore this complexity. In this way the constraints of current methodologies need to be given far more meaningful attention, and problems with such methodologies that are in fact insurmountable need to be acknowledged.

The limitations of the tripartite justice model as well as the methodologies employed by researchers were the first two arguments to emerge from the research and literature review presented in the first half of this thesis. The third argument, discussed in Chapter three, relates to the extent to which organisational justice concerns can be considered distinct from other types of justice. As stated earlier researchers have argued that organisational justice concerns are autonomous and independent from other justice concerns. This assertion has resulted in the emergence of a distinct 'variable', that of organisational justice, that is seen to be discrete from the rest of the justice literature. Despite this, there is no clear evidence that this claim to autonomy is true. Organisational justice research has not focused on providing empirical evidence for this contention, nor has a body of theory specifically aimed at addressing workplace concerns emerged. Currently, what delineates this variable as something distinct is the context in which it is investigated – the workplace. It is, therefore,

clear that the notion that organisational justice is something separate from other types of justice requires some debate and empirical investigation.

This type of investigation becomes increasingly important in the face of the criticisms of reductionism made in relation to research in the area. Much of the research conducted within the area of organisational justice isolates people's broader experiences from those they have at work. In this way there is very little recognition that who a person is when they are outside of the organisation can have an important impact on how they experience justice in the organisation itself. As such even if organisational justice is understood to be a separate concern from that of social justice, account still needs to be given of the broader social context in which people operate.

The final argument made in the theoretical review relates to one particular way in which justice research can account for some of the complexities of social context and personal circumstances – that is an exploration of the role demographic variables play in influencing perceptions of justice. As discussed in Chapter four, demographic variables are potentially a source of valuable insight into people's experiences of justice. Firstly they are markers of social ~~and group identity~~position which was argued are inextricably linked to experiences of justice. They are also a rich source of information about the social context in which people operate. Secondly, many societal allocation decisions are made on the basis of demography – marital status, number of children, age, race, gender, level of education, and health status are just some of the variables that may determine access to resources and conditions within a

particular society and as such might influence one's attitudes to and perceptions of a range of related constructs, including, if not primarily, perceptions of fairness of that society.

Despite the importance of such variables, this is not an area that has been consistently or thoroughly researched. Similar to the reductionistic ways in which other questions about justice have been researched, social ~~identity~~position and demographic variables have been understood in quite isolated and reductionist ways. One or two demographic variables are taken to signify the whole – or certainly a large part - of one's ~~identity~~position. In this way nationality or race become measures of culture, or gender becomes a signifier of identity. Research that has attempted to look at demographic variables has tended to isolate one such characteristic, such as gender, race or nationality. These research results are, ~~perhaps unsurprisingly~~as discussed in the previous chapter, inconsistent. ~~A poor black woman, for instance, may differ considerably from a rich white woman, a married man with four children from a single man with no children. No attention has been given to the differences that exist within these broad demographic categorisations. In addition to this, very little attention or consideration has been given to the complex ways in which such variables interact, or the salience a range of other demographic variables have for people.~~

Furthermore the way in which researchers define and measure the demographic variables that are studied is often needlessly reductionist, perhaps in an attempt to limit the number of categories in order to make certain statistical procedures possible. It is clear that any attempt to explore the relationship between demographic variables and perceptions of justice needs to consider more carefully how the variables under investigation are defined, as well as to

measure these in a more heeded and in depth way. Further to this, it is clear that only a limited number of demographic variables have been looked at in relation to perceptions of justice, particularly race, gender, religion and nationality. While these are all important and informative characteristics, there may be a host of other such variables that can provide important insight into the area. Organisational variables (such as tenure, union membership, job title, number of promotions in the organisation, length of tenure in one's current position), domestic indicators (such as marital status, number of children, how many people one lives with, where one lives) and socio-economic variables (such as income, number of dependants, whether one owns one's house) as well as a range of other characteristics could all provide valuable information about experiences of justice.

It is clear that demographic variables are important indicators of social and group ~~identity~~position, and that such variables locate people within the social and political context of their society. Being a women, or black, young, or rich all have meanings that extend beyond simple identifiers, and these meanings become particularly important when considering questions about justice. Theorists have argued that this social position, one that comprises a myriad of demographic variables, is crucial to understanding questions about justice. Finding ways of exploring this relationship while attempting to account for the complexity of these variables is thus fundamental.

As can be seen four key challenges have emerged from the review of the literature. These challenges have shaped both the research questions being posed, as well as the methodological approach adopted. The first two concerns, that of the almost exclusive use of

the tripartite justice model as well as the methodological limitations of research in the area provide the rationale for the methodological approach to this study. The second two concerns, that of the relationship between organisational and social justice, as well as the relationship between demographic variables have directed the research questions. Each will be discussed in turn.

As can be seen from the literature, two important sets of questions about justice perceptions require attention from researchers. The first pertains to the interface between different 'types' of justice, in the case of this study, that of organisational and social justice, and asks: **Are people's experiences of organisational justice related to their experiences of social justice?** The second question refers to similarities and differences in experiences of justice. At its broadest this question can be asked as follows: **In what ways do people aggregate together in relation to their experiences of justice?** This is particularly important given that the structure of justice perceptions is not being assumed in the current study, and as such exploring alternate dimensions of justice concerns that might emerge is central.

The next set of questions looks at the relationship between demographic variables and experiences of justice, and at its broadest asks: **do demographic variables determine experiences of organisational and social justice?** To this end, this study will firstly investigate a wide range of biographic, work, financial, and religious demographic variables, and will explore which of these demographic variables emerge as being more significant in terms of predicting peoples' experiences of justice. Furthermore it will attempt to explore how these demographic variables interact with one another in predicting experiences of

justice. As such the study will explore whether demographic variables predict cluster membership i.e. Can groups of people who hold similar social justice perceptions be characterised by similarities in demographic variables?

Tools like cluster analysis and CHAID that are being used in this study and will be discussed in more detail further on in this chapter, work without a priori assumptions. They may be used for hypothesis testing, but can also be used to develop hypotheses through the exploration of data patterns. It is in this latter way that the present research uses these techniques – in order to explore justice perceptions and demographic variables for patterns, not for hypothesis testing.

Methodological Approach of the Study

As mentioned previously, two concerns articulated in the preceding chapters, that of the almost exclusive use of the tripartite justice model as well as the methodological limitations of research in the area, provide the rationale for the methodological approach to this study. As discussed, previous psychological research has tended to rely rather heavily on experimental research designs, often using samples of university students. Where research is conducted in the field it rarely involves semi or unskilled workers – samples tend to comprise more educated, literate employees. While such research is important for the development of theory and the exploration of its applicability within certain settings, it has been argued in the preceding chapters that alternate approaches to justice research that attempt to explain the real world complexity of people's experiences are also needed. The current study thus calls for a research design and methodology – with particular emphasis on

the sample, measuring instruments as well as the statistical analyses – that addresses some of the concerns articulated by the author.

The current study is quantitative in nature, and makes use of a non-experimental, partially exploratory, cross-sectional design. The design is non-experimental as there is no control or manipulation of the independent variable. In addition to this, there is no control group (Leedy, 1993). According to Kerlinger (1986), non-experimental research is the most systematic, empirical enquiry from which inferences about the relationships between variables (rather than cause and effect relationships) can be made. The current research is exploratory in nature because while the relationship between demographic variables and justice perceptions have been given some attention as by-products of other research efforts, no attempts have been made to intentionally explore specific and focussed demographics, within a theoretical framework. In addition to this, the interaction between demographic variables in relation to perceptions of justice has not been explored. As such, the relationship between this independent and dependent variable has not previously been explored. As this research involves the observation of the variables at the same point in time, it is cross sectional in nature (Rosenthal and Rosnow, 1991; Kerlinger, 1986).

Such a research design requires the participation of a large, diverse sample of people with a wide range of life circumstances, who, to some extent, can be seen to be representative of the kind of population that organisational justice research is most often applied to. In this way participants can be asked about their actual experiences and perceptions of justice, rather than be asked to imagine a scenario or draw on experiences they have not had. As

such the present study was conducted in a large South African organisation. This organisation manufactures and distributes paint, and as such have a number of different factories, depots, as well as administrative centers around the country. The company employs approximately 1500 people, with sites in every province in South Africa and a head office in Johannesburg. A wide range and level of skill and expertise is utilised within this company. With regards to the production of the goods they manufacture, employee skills range from the more highly skilled engineers, chemists, laboratory technicians, and researchers, to semi-skilled mixers and machine operators and unskilled packers and fillers. In terms of the ongoing functioning of the factories and sites, the organisation employs engineers, electricians, and fitters and turners, as well as general maintenance staff, and security personnel. There are also centralised as well as regional administrative, human resource, strategic, and financial functions, for which the company employs appropriate staff.

As the present study is focussing on demographic variables, an organisation that could afford access to a very diverse potential sample was essential, and this organisation proved to be appropriate in this regard. In order to obtain permission to conduct this research in the organisation, the researcher was required to meet with the Human Resources Director, the regional Human Resources Managers, as well as representatives of the unions operating in the organisation. A presentation was made at the organisation's national forum, and then again at the regional forums. Once permission to conduct the research was obtained from all the relevant parties, all scales, instructions, and preambles were translated into Zulu and Afrikaans. These languages were selected on the advice of the union representatives and

Human Resources Managers and are based on the language profile of the employees. Back translations were conducted in order to check the accuracy of the translations, and corrections made where necessary.

Meetings with the employees were set up at the three larger sites, namely Johannesburg, Cape Town and Durban. Employees were divided into groups ranging from 10 to 30, depending on the size of the department, where they were addressed by the researcher or a research assistant (where several meetings were taking place simultaneously). Employees were informed about the nature of the research, what was required of those who wished to participate, issues pertaining to the confidentiality and anonymity of their responses, as well as the voluntary nature of the research. Employees were then given an opportunity to ask any questions. Those employees who wished to participate completed a questionnaire, while those who didn't returned to their departments. Participants were handed a questionnaire in a language of their choice, along with an envelope in which to seal their completed responses. Every questionnaire had a covering letter that repeated the details provided to the employees verbally (See Appendix A). A sealed box was placed at the front of the room, and employees placed their sealed envelopes into the box. The researcher or the research assistant then immediately removed the boxes.

For the smaller sites that were not easily geographically accessible, questionnaires with envelopes were sent to the site managers. All the managers were informed telephonically about the research and were given instructions for the distribution and collection of questionnaires. Similar to the larger sites, the employees were informed about the research.

Those who wished to participate were given a questionnaire in the language of their choice, along with an envelope in which to seal their completed form. A box was placed in a central but secure place, and all completed and sealed questionnaires were placed by the employees in the box. The completed questionnaires were then sent by courier to Johannesburg, where the researcher collected them.

This procedure generated a response of usable questionnaires from 467 of the employees. With regards to the personal characteristics of the sample (See Table 5.1.) 323 (69.16%) of the questionnaires were completed in English, 81(17.34%) in Zulu, and 63 (13.49%) in Afrikaans. 71 (15.20%) of the respondents work in two sites in the Cape region, 47 (10.06%) are from the Head Office in Johannesburg, 200 (42.83%) work in the factory in Krugersdorp, 93 (19.91%) work in the Durban site, and 56 (11.99%) work in the smaller depots in the Durban coastal region. 359 (77.04) of respondents are male, and 107 (22.96%) are female. With regards to level of education 20 (4.83%) of respondents have a Std 5 or below, 103 (24.88%) have some high school education but not a matric, 180 (43.48%) respondents have a matric, 66 (15.94%) have a diploma, 35 (8.45%) a degree, and 10 (2.42%) have a post graduate degree.

In relation to employment demographics (See Table 5.2.) , 80 (17.94%) of respondents are administrative staff (i.e. work as clerks, secretaries, or administrative assistants), 37 (8.30%) are laboratory staff (i.e. lab or colour technicians, chemists, lab assistants or research chemists), 162 (36.32%) are general factory staff (i.e. pickers, packers, or fillers), 35 (7.85%) are managerial and executive staff, 35 (7.85%) are supervisory staff , 26 (5.83%) are security staff, 9 (2.02%) are human resources staff, 17 (3.81%) are technical staff (i.e.

engineers, fitters, information technology specialists, or maintenance staff), while 20 (4.48%) are financial staff (i.e. all accounting functions and credit control).

In terms of age and tenure (See table 5.3), the minimum age is20, while the oldest employee is 69. The mean age for the sample is 39.55. The minimum tenure is 3 months (one quarter of a year), while the maximum tenure is 42 years. The mean tenure is 11.37. The minimum amount of tenure in the respondent's current job is 0 (the employee was starting that job on the day they completed the questionnaire), while the maximum is 33 years. The mean tenure for current position for the sample is 6.54 years.

Table 5.1. Demographic Frequencies of Sample – Personal Characteristics

		Frequency	Percent	Cumulative Frequency	Cumulative Percent
Language					
1	English	323	69.16	323	69.16
2	Zulu	81	17.34	404	86.51
3	Afrikaans	63	13.49	467	100.00
Area					
1	Cape Region	71	15.20	71	15.20
2	Head office (JHB)	47	10.06	118	25.27
3	Krugersdorp	200	42.83	318	68.09
4	Durban	93	19.91	411	88.01
5	Durban Coastal	56	11.99	467	100.00
Gender (n Missing =1)					
1	Male	359	77.04	359	77.04
2	Female	107	22.96	466	100.00
Education (n Missing =53)					
1	Up to Std 5	20	4.83	20	4.83
2	Std 6-Std 9	103	24.88	123	29.71
3	Matric	180	43.48	303	73.19
5	Diploma	66	15.94	369	89.13
6	Degree	35	8.45	404	97.58
7	Post Graduate Degree	10	2.42	414	100.00

Table 5.2: Demographic Frequencies of Sample – Employment Characteristics

		Frequency	Percent	Cumulative Frequency	Cumulative Percent
Job Title (n Missing =21)					
1	Administrative Staff	80	17.94	80	17.94
2	Laboratory Staff	37	8.30	117	26.23
3	General Factory Staff	162	36.32	279	62.56
4	Managerial Staff	35	7.85	314	70.40
5	Supervisory Staff	35	7.85	349	78.25
6	Sales Staff	25	5.61	374	83.86
7	Security staff	26	5.83	400	89.69
10	Human Resources	9	2.02	409	91.70
11	Technical Staff	17	3.81	426	95.52
14	Financial Staff	20	4.48	446	100.00
Contract Type (n Missing =3)					
1	Full-Time	432	93.10	432	93.10
2	Part-time	14	3.02	446	96.12
4	Contract	18	3.88	464	100.00
Union (n Missing =8)					
1	No Union	225	49.02	225	49.02
2	SACWU	105	22.88	330	71.90
3	SEPPAWU	122	26.58	452	98.47
4	Other	7	1.53	459	100.00
Salary (n Missing =9)					
1	R500-R1000	8	1.75	8	1.75
2	R1001-R1500	13	2.84	21	4.59
3	R1501-R2000	54	11.79	75	16.38
4	R2001-R3500	133	29.04	208	45.41
5	R3501-R4000	65	14.19	273	59.61
6	R4001-R4500	28	6.11	301	65.72
7	R4501-R5000	29	6.33	330	72.05
8	R5001 or above	128	27.95	458	100.00

Table 5.3: Sample Descriptors – Age and Tenure

Variable	Maximum	Mean	Minimum	N	N Missing	Std Dev
Age	63.00	39.55	20.00	455	12	10.40
Tenure Org	42.00	11.37	0.25	461	6	9.76
Tenure Job	33.00	6.54	0.00	455	12	6.80

By conducting a field study, using a non-experimental research design, and recruiting a large, diverse sample of employees, the current study has addressed some of the concerns raised in the preceding chapters. These factors form a suitable point of departure for the current study, however the method of data collection (particularly in relation to how the variables under investigation are defined and measured) and analysis are arguably central to dealing with the limitations of research in this area articulated in the preceding chapters and answering the research questions in a way that accounts for the complexities of real life experiences. As was pointed out and illustrated in the first half of this report, data collection has relied on traditional measuring instruments, where variables are defined on the basis of certain unchallenged assumptions and where statistical analysis is conducted using score totals (derived from adding up responses to a range of questions). Such an approach, while useful for certain types of investigations, are of limited value for the current study, which is attempting to avoid both the theoretical assumptions underpinning more traditional measuring instruments as well as reductionist methodologies. The following two sections report on measures adopted in the current study to address each of these two concerns – that of the measuring instruments used and developed for the study, as well as the statistical procedures used for data analysis.

Defining and Measuring the Research Variables

Three sets of variables are under investigation in the current study, that of social justice perceptions, organisational justice perceptions, and demographic variables. As discussed in the previous chapters researchers have been restrictive in the way in which they have

defined and measured such variables. With regards to justice perceptions, they have made use of a tripartite model to understand and explain perceptions of social and organisational justice. It was argued that this model has been over emphasised and that thinking about justice has become ossified in relation to the three dimensions that comprise this framework. With regards to demographic variables, it was argued that the way in which researchers define and measure the demographic variables that are studied is often needlessly reductionist, More careful attention needs to be given to which demographic variables are included, how the variables under investigation are defined, as well as how they are measured. An important challenge for the current study was thus finding ways of defining and measuring the variables under investigation in such a way that these concerns were addressed. It is important to note at this point that the statistical tools used to analyse the data yielded by the questionnaires do not work on the basis of a scale. Analyses will be done at an individual item level, and scale totals will not be obtained. In this way constructs that require psychometric analysis are not being used. This will be discussed in more detail further on in this chapter where cluster analysis is presented. However it is significant at this point to say that given this level of analysis the psychometric properties of scales are not relevant for the central questions of the current study.

In relation to the demographic variables, two concerns emerged from the literature and previous research. The first pertains to which demographic variables to include in the study, with a particular emphasis on the identified need to explore the real world complexities of social ~~identity~~ position (as discussed in Chapter 4). The second concern

relates to how these variables, once identified, should be measured, bearing in mind the need to obtain several indices of each characteristic. As discussed in Chapter 4, there are a number of variables that may constitute demographic descriptors of an individual, ranging from simple descriptors, or as Young (1990) terms them aggregators, such as hair or eye colour to more meaningful social groupings such as race or gender. It would not be possible, or necessary, to include all such descriptors in the current research. Given the discussion of justice and ~~identity~~ demography in the previous chapters, and in light of the research questions, the most suitable variables to look at would be those that are indicators of social position i.e. those variables that may effect or help determine a person's experience of resource acquisition and distribution. In order to gain a holistic picture of an individual's social position, it is important to look at all the areas from which such positioning is derived. It would not be sufficient to look only at information about a respondent's job, for example, as characteristics of home, community life, and the individual him/herself, may be as important in determining social status.

Several key areas, central to the notion of social position, can be identified. These include personal descriptors (e.g. age, race, gender), employment descriptors (e.g. job title, position in organisation, length of employment, union membership), domestic descriptors (e.g. marital status, number of children, living arrangements), financial descriptors (e.g. monthly income, investments, property), and religious descriptors (e.g. membership of religious community, religious affiliation, religious activities). Demographic information in these areas can be seen to be central to an individual's social position in that they will directly affect the resources one has access too.

Even within these parameters there are many demographic variables one could look to, and no research can hope to be exhaustive in this regard. Rather, it is important to include questions that will provide an adequate amount of information about the area of interest. If, for example, it was decided that financial variables would provide valuable information in relation to the research question, there are a number of questions that could be asked in order to determine a person's financial status. It would not be sufficient to simply ask respondents what their monthly income is. At the same time, it would not be plausible or desirable to ask for detailed banking and budget information. Some sample questions that would give an indication of the respondent's income, their financial obligations, and their accumulated assets would provide sufficient information. As such, for each of the descriptors, a number of questions (gathered from market research and financial assessment instruments) were asked. While these were understood to be indexical in nature rather than exhaustive, they were sufficiently in depth to provide a more holistic picture of the variable than the use of one or two indices.

For example, economic or financial status was assessed using the following questions: what is your monthly salary?; do you have a spouse or partner that earns an income?; apart from any other household salaries (as discussed above), do you have any other additional monthly income?; how many people are financially dependant on you (e.g. children) ?; of these dependants, how many are being educated, are unemployed by choice (e.g. housewife, mother), are unable to find work, or are unable to work due to old age or ill health?; are you on a pension plan ?; do you belong to a medical aid?; do you own the home in which you

live?; do you or your spouse/partner have any investments?. In addition to this, a list of basic and luxury household items were presented, and respondents were asked which of the items they owned. As can be seen such questions, while not exhaustive, do provide a more in depth and holistic profile of the person than simply asking a single question about income.

The demographic blank was presented to researchers in a number of other disciplines (including Sociology, Politics, Economics, and Law) as well as to a demographer for comment, and it was agreed that both the terminology used (i.e. demographic variables and social position) as well as the variables chosen , form standard features in other research and were appropriate choices in relation to the current study.

The second set of measures to be sourced or developed related to the two aspects of justice under investigation, that of social and organisational justice perceptions. As stated earlier, new or alternate ways of defining and measuring justice perceptions – ones that do not necessarily assume the structure of justice perceptions in this way – are a fundamental part of the methodological concerns of the current study. In order to address this concern a more generalised measure of justice perceptions needed to be sourced or developed. A global measure of justice would not be based on the tripartite framework, and unlike more traditional measures of justice would therefore not divide questions up into distributive, procedural and interpersonal concerns. Instead it would need to extract from respondents a more general sense of their perceptions in relation to the different experiences and events they encounter in their day to day life. Such a

measure, by not imposing an a priori framework, might allow different configurations or dimensions of justice to emerge.

With regards to social justice perceptions the belief in a just world scale (Rubin & Peplau, 1973) was used. Just World Theory (Lerner, 1970) hypothesises that people have a need to believe that, in general, people get what they deserve i.e. that the world is, for the most part, a just place – a place where one's merit and fate are closely aligned (Rubin & Peplau, 1973). While this hypothesis and its resultant controversy are not central to the current research, scales developed to measure belief in a just world are suitable measures of social justice perceptions.

A belief in a just world scale was developed by Rubin and Peplau (1973) in order to measure " An attitudinal continuum extending between two poles of total acceptance and total rejection of the notion that the world is a just place." (Rubin and Peplau , 1973, p. 66). The scale has 20 items and respondents are asked to reflect their degree of agreement or disagreement with these items on a six point Likert scale. The items are drawn from a range of domains including health, family, school, politics, and criminal justice, and the questions are divided into those that assess 'just world beliefs' and those that assess 'unjust world beliefs'. The scale has been criticised particularly in relation to the implications it has for the belief in a just world hypothesis. Theorists argue that this belief is a personality trait that emerges out of critical developmental stages we go through as children. The key concern about the scale is that it is over simplistic and measures an attributional style rather than a personality dimensions (Lerner, 1980). In fact when looking at the items in

the scale, at face value they are arguably asking simply about the perceived fairness of one's social world, particularly when considering the South African context. Some of the questions in this scale include: It is rare for an innocent man to be wrongly sent to jail, Many people suffer through absolutely no fault of their own , It is a common occurrence for guilty people to get off free in South Africa, and It is often impossible for people in South Africa to receive a fair trial. Such questions cannot be seen to be measuring a deep set personality trait, particularly given the past and current realities of South Africa. If , for example, someone states that they believe it is impossible for someone to get a fair trial in South Africa, this could arguably be a valid concern given problems related to access to lawyers, the failings of policing in the country, the pressures and problems facing the courts, and even the racial tensions splitting the South African bar. Similarly, if one feels that people are suffering through no fault of their own, it is more likely to be because one is faced with beggars, homeless people, street children and hawkers at almost every single traffic light in cities like Johannesburg.

While this has important implications for Just World research, it arguably makes the measure particularly suitable for the current study in that it asks direct questions about the perceived fairness of one's social world. This is particularly true given that the statistical analyses used to explore the data do not make use of an additive total i.e scale totals comprised of adding up scores across each item . Instead each item is looked at individually, and response profiles of respondents are analysed. In this way the Belief in a Just World Scale can be used simply as a list of questions asking people about their opinions of the social world in which they live. The scale thus provides a vehicle with

which to explore people's perceptions of justice in relation to different aspects of their social world, and can serve as a suitable proxy for a ssocial justice perceptions measure.

The scale has been extensively used in social justice research (Furnham & Procter, 1989) and extensive information (mainly inconsistent) is available about the psychometric properties of the measure. With regards to the reliability of the scale, Cronbach alphas ranging from .63 to .81 have been reported (Bruhn, 1998; Furnham & Procter, 1989; Rubin & Peplau, 1973). Rubin and Peplau (1973) reported an alpha of .79, Ma and Smith (1985) one of 0.78. Smith and Green (1984) reported an alpha of 0.67. Furnham (1997) administered the scale to 1700 students in twelve different countries. Of the twelve groups, alphas of above 0.60 were reported for seven. The alphas ranged from 0.46 to 0.71. Similarly, in a study with over 2000 subjects, Furnham (1988) reported alphas of between 0.53 and 0.81.

In terms of construct validity, factor analysis has not produced consistent results in relation to the multi-dimensionality of the scale (Whatley, 1993), with some research indicating a one-factor scale (Ahmend & Stewart, 1985), and other research a two or four factor one (Couch, 1998; Ambrosia & Sheehan, 1990; Hyland & Dann, 1987). Given this inconsistency, it is most often used as a one-dimensional scale (Tanaka, 1999). Furnham and Procter (1989) argue that the scale has satisfactory face, concurrent, and predictive validity in that it has been shown to correlate with several other self-report measures and has been found, in experimental studies, to be predictably related to specific behaviours.

Given the concerns and focus of the current study, this scale seemed to be an appropriate measure of social justice perceptions in that it asks twenty questions about the perceived fairness of different aspects of the social world.

Sourcing an appropriate measure for organisational justice perceptions was more problematic in that existing scales are almost entirely defined in relation to the tripartite model. Only measures that looked at justice perceptions in relation to procedural, distributive, and interpersonal concerns were available. As such a new, global organisational justice scale that does not assume the structure of such perceptions needed to be developed for the current study. The following paragraphs will describe the methodology used to develop and validate such a scale.

The first step involved generating a number of items that could be piloted on a sample of employed individuals. As the scale is attempting to measure perceptions about the general functioning of the organisation, and could not assume the structure of justice perceptions themselves, it was decided to first identify the key areas of organisational functioning and then to direct the questions to the perceived fairness of those areas. This marks a deviation from more traditional measures of organisational justice which have first identified the structure of justice in relation to distributive, procedural and interpersonal concerns, and have then asked quite general organisationally orientated questions about the dimensions. For example participants might be asked questions about interpersonal justice such as “To what extent do the managers at your company treat you with respect and courtesy?, or procedural justice questions such as “To what

extent do the managers in your company adequately consider your viewpoint? “ or “When procedures are applied management bases its decisions on accurate information”. Distributive questions might be phrased as “To what extent are you fairly rewarded considering the responsibilities that you have?”. As can be seen these questions have the different dimensions as their basis, and the contextual elements are very general, referring to all procedures, rewards and interactions in the organisation.

Six key areas that cover a representative portion of organisational activities were identified through the literature. These included selection and recruitment, training and development, industrial relations (including management-worker relations, disciplinary policies and practices, union-organisational relations, as well as grievance policies and practices), organisational structure (including communication and decision-making), work allocation, and remuneration and reward. Twenty-four items were generated in order to assess justice perceptions of each of these areas of organisational functioning (See Table 5.4) . Certain items asked directly if certain practices were fair, while other items assessed the underlying principles of fairness proposed by theorists e.g. consistency, inclusiveness, transparency. Once these items were generated they were presented to several experts in the area of organisational behaviour as well as social justice. This included a sociologist, a political scientist, an industrial psychologist, as well as a lawyer. All these people assessed the proposed scale as having adequate face validity and no additions or alterations were suggested.

Next a pilot study was conducted in order to validate the scale. Two versions of the scale were presented, where the items were ordered differently. These have been termed Form

1 and Form 2 respectively. As this scale is attempting to measure perceptions of organisational justice, the optimum pilot sample would comprise employees of a South African organisation. As such an administrative branch of a large bank was approached, and they gave permission for the research to be conducted in their organisation. Questionnaires with a brief demographic blank, an envelope, and a covering letter explaining the purpose of the research as well as the employees rights regarding participation were handed to all employees as they came to work in the morning. A sealed box was placed in the reception area, and employees were asked to place completed questionnaires in the envelopes and then into this box. The box was collected by the researcher at the end of three days. All responses were then analysed.

A total of 184 employees responded. As can be seen in Table 5.5 the sample consisted of 140 (76.1%) female respondents and 36 (19.6%) male respondents. Regarding position in the organisation, 131 (71.2%) respondents were members of team groups, while 26 (14.1%) were team leaders. The racial composition of the sample was 69 (37.5%) black respondents, 26 (14.1%) white, 66 (35.9%) Coloured, and 9 (4.9%) Indian respondents. 79 respondents belonged to a union, while 95 were not union members. The ages of the respondents (See Table 5.6.) ranged from 19 to 54, with the mean age being 29.63.

As can be seen from Table 5.7, 90 (48.9%) respondents completed Form 1, and 94 (51.1%) completed Form 2. Of those respondents that completed Form 1, 69 (76.7%) were female, and 16 (17.8%) were male, while the respondents of Form 2 comprised 71 (75.5%) females and 20 (21.3%) males. With regards to position in the organisation,

Form 1 was completed by 70 (77.8%) team group members and 7 97.8%) team leaders , while Form 2 was completed by 61 (64.9%) team group members and 19 (20.2%) team leaders. 37 (41.1%) of the respondents who completed Form 1 were members of a union, while 46 (51.1%) were not. With regards to Form 2, 42 (44.7%) respondents were union members, while 49 (52.1%) were not. In terms of racial composition, Form 1 was completed by 31 (34.4%) black respondents, 9 (10%) white respondents, 36 (40%) coloured respondents, and 6 (6.7%) Indian respondents. Form 2 was completed by 38 (40.4%) black respondents, 17 (18.1%) white respondents, 30 (31.9%) coloured respondents, and 3 (3.2%) Indian respondents.

As can be seen from Table 5. 9, the minimum score for Form 1 was 24, and the maximum was 115. The mean score for Form 1 was 70.17, and the standard deviation was 19.09. The minimum score for Form 2 was 29, and the maximum score was 110. The mean score for Form 2 was 69.32 and the standard deviation17.77. Both Forms have mean scores that indicate moderately fair perceptions of organisational justice.

With regards to the reliability of the scale, both Forms produced Cronbach Alpha Co-efficients of above .90 (See table 5. 10) (Form 1 has an alpha of .96, and Form 2 has one of .94), indicating high levels of internal consistency. From the item-total statistics for both Form 1 and Form 2 (Table 5.11 and 5.12 respectively) it can be seen that all of the items correlate significantly with the total, and the alpha would not be improved by removing any of the items. In addition to this the mean score of the scale would not be

significantly effected by the removal of any of the items (it remains between 69 and 70 for Form 1 and 67 and 68 for Form 2).

In order to assess the validity of the scale, a principle component factor analysis was conducted for each version of the scale. With regards Form 1, four factors with eigenvalues larger than 1 were initially extracted on the basis of Kaiser's criterion (See Table 5.13). The first factor accounted for 54.15% of the variance, the second factor for 5.13% (60.28% cumulative), the third for 4.98% (65.27% cumulative), and the fourth for 4.74% (70.01% cumulative). The scree plot (Table 5.14) has one sharp direction change, indicating a possible two factor solution.

The unrotated component matrix (Table 5.15) indicates that all the items are loading most heavily onto Factor 1, except for item 11, which is loading onto Factor 2, and item 18, which is loading onto Factor 4. Despite this, these items are still loading very significantly onto Factor 1. The rotated component matrix (varimax rotation) (Table 5.16) indicates that once again all the items are loading onto Factor 1. However the majority of the items are loading in on all four factors, with the rest loading in on at least three of the factors.

There is a clear indication that a 1-factor solution may be the most appropriate for this instrument. The first factor is accounting for a considerable amount of the variance (54.14%), and while there are three other factors with eigenvalues larger than one, all three of these components are accounting for only an additional 15% of variance. The scree-plot (Table 5.14) supports a solution with fewer factors, as there is only one significant direction

change. With regards to the factor loadings, the unrotated solution indicates that all the items are loading onto Factor 1. The rotated solution is also indicating that all the items load into Factor 1, and that given that all the items are loading in across most of the factors, the other three factors are not easily distinguishable from one another or from factor one. This is in line with the scale development in that it supports a one factor, global organisational justice perception.

Table 5.4 : Global Organisational Justice Perceptions Items

All employees are treated fairly.	General
Employees are paid a fair salary.	Remuneration and Reward
Employees are rewarded for their efforts.	Remuneration and Reward
You will be promoted if you deserve it.	Remuneration and Reward
Every employee will have a fair hearing when problems arise.	Industrial Relations
Managers are, for the most part, fair in their dealings with employees	Industrial Relations
Management gives representative unions their due respect and consideration.	Industrial Relations
Punitive action taken against employees is, for the most part, fair.	Industrial Relations
The disciplinary procedures used are fair.	Industrial Relations
Grievances against managers are dealt with appropriately	Industrial Relations
Managers and supervisors communicate effectively with their subordinates	Organisational structure
For the most part, relevant information is shared with all employees.	Organisational structure
Employees' input is important when decisions are made.	Organisational structure
Employees are part of the decision making process.	Organisational structure
Decisions that are made are in the best interests of all employees.	Organisational structure
Employees' input is used appropriately when decisions are made.	Organisational structure
When applying for a job, all qualified applicants have a fair chance of being selected.	Selection and recruitment
Selection procedures used to fill vacancies are fair.	Selection and recruitment
The best person for a job usually gets the job.	Selection and recruitment
When a position becomes available, the post is advertised so as many people as possible will hear of the vacancy.	Selection and recruitment
All employees have a fair chance of getting access to training.	Training and Development
Everyone has the opportunity to develop themselves professionally.	Training and Development
Everyone does their fair share of work.	Work Allocation
Work is allocated fairly.	Work Allocation

Table 5.5: Demographic frequencies for Total Sample (Pilot Study)

Gender	Frequency	Percent
Male	36	19.6
Female	140	76.1
Missing	8	4.3
Position		
Member	131	71.2
Leader	26	14.1
Missing	27	14.7
Race		
Black	69	37.5
White	26	14.1
Coloured	66	35.9
Indian	9	4.9
Missing	14	7.6
Union Membership		
Yes	79	42.9
No	95	51.6
Missing	10	5.4

Table 5.6 : Age for Total Sample (Pilot Study)

Age				
N	Min.	Max.	Mean	Std. Dev.
173	19.00	54.00	29.63	6.55

Table: 5.7: Demographic Frequencies for Sample: Form 1 and Form 2 (Pilot Study)

Form		Frequency	Percent
1		90	48.9
2		94	51.1
Gender			
Form		Frequency	Percent
1	Male	16	17.8
	Female	69	76.7
	Missing	5	5.6
Form		Frequency	Percent
2	Male	20	21.3
	Female	71	75.5
	Missing	3	3.2
Position			
Form		Frequency	Percent
1	Member	70	77.8
	Leader	7	7.8
	Missing	13	14.4
Form		Frequency	Percent
2	Member	61	64.9
	leader	19	20.2
	Missing	14	14.9
Union Membership			
Form		Frequency	Percent
1	Yes	37	41.1
	No	46	51.1
	Missing	7	7.8
Form		Frequency	Percent
2	Yes	42	44.7
	No	49	52.1
	Missing	3	3.2
Race			
Form		Frequency	Percent
1	Black	31	34.4
	White	9	10.0
	Coloured	36	40.0
	Indian	6	6.7
	Missing	8	8.9
Form		Frequency	Percent
2	Black	38	40.4
	White	17	18.1
	Coloured	30	31.9
	Indian	3	3.2
	Missing	6	6.4

Table 5.8 : Age for Sample Form 1 and Form 2 (Pilot Study)

Form	N	Min.	Max.	Mean	Std. Dev.
1	83	19.00	54.00	28.80	6.63
2	90	20.00	49.00	30.38	6.42

Table 5.9 : Descriptives for Form 1 and Form 2 (Pilot Study)

Form	N	Min.	Max.	Mean	Std. Dev.
1	90	24.00	115.00	70.17	19.09
2	94	29.00	110.00	69.32	17.77

Low	Moderate	High
24	72	120

Table 5.10 : Cronbach Alphas for Form 1 and Form 2 (Pilot Study)

	Cronbach Alpha
Form 1	.96
Form 2	.94

Table 5.11 : Item-total Statistics for Form 1 (Pilot Study)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
J1	69.8095	304.1889	.7207	.8148	.9593
J2	69.9206	304.9452	.7227	.7856	.9593
J3	69.9365	302.3507	.7546	.7817	.9590
J4	69.8889	305.6810	.7540	.7928	.9590
J5	69.9048	305.5069	.6451	.6732	.9601
J6	70.5079	304.3830	.7174	.7661	.9593
J7	70.1429	301.1244	.7485	.7349	.9590
J8	69.7619	305.1843	.7814	.7871	.9588
J9	69.8413	316.4905	.5428	.6204	.9609
J10	70.0000	304.4839	.7854	.8474	.9587
J11	70.6825	311.1879	.4980	.6764	.9617
J12	69.8730	307.0804	.8126	.8375	.9587
J13	70.1587	301.7486	.7105	.7998	.9595
J14	70.0635	306.0927	.6317	.8123	.9603
J15	70.0317	308.9990	.7632	.6966	.9591
J16	70.2381	305.0553	.6912	.6107	.9596
J17	70.0635	304.5765	.7948	.8338	.9586
J18	69.5556	315.5412	.4867	.5666	.9614
J19	70.0317	305.9022	.6738	.7428	.9598
J20	69.7778	306.6272	.7541	.7478	.9591
J21	70.2063	310.0696	.6550	.6732	.9599
J22	69.9683	304.2893	.7001	.7381	.9595
J23	69.9683	305.1925	.7945	.8993	.9587
J24	70.1270	301.9191	.7320	.8372	.9592

Table 5.12 : Item-total Statistics for Form 2 (Pilot Study)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
J1	68.1389	301.4452	.5728	.5927	.9486
J2	67.4167	295.6831	.6892	.6531	.9471
J3	67.4722	302.3936	.5663	.6919	.9486
J4	67.6667	294.9014	.7147	.7271	.9468
J5	67.3750	296.2377	.7279	.7553	.9466
J6	67.5556	300.7856	.6535	.6997	.9476
J7	67.8194	301.6712	.5893	.6289	.9483
J8	67.4167	303.9930	.5241	.5160	.9491
J9	67.5000	295.4366	.7358	.7626	.9465
J10	67.5556	293.4898	.7643	.7825	.9461
J11	67.6667	298.3380	.6145	.5825	.9481
J12	67.4444	308.3349	.4212	.6068	.9503
J13	67.6528	296.3707	.7367	.7242	.9465
J14	67.3472	297.9763	.6744	.7053	.9473
J15	67.1806	303.9529	.5942	.6549	.9482
J16	67.4028	302.6383	.6932	.6970	.9473
J17	67.3472	306.2580	.6023	.6389	.9482
J18	67.3333	306.8169	.5795	.7691	.9484
J19	67.1944	305.7363	.5707	.6202	.9485
J20	67.1806	299.0796	.6174	.5626	.9480
J21	67.6667	295.8028	.6704	.6422	.9474
J22	67.5278	298.5908	.7680	.8004	.9464
J23	67.6250	300.9982	.7106	.7464	.9470
J24	67.7361	290.5632	.7686	.7886	.9460

Table 5.13 : Factor Extraction with Kaiser's Criterion for Form 1 (Pilot study)

Total Variance Explained[a]

Compone	Initial Eigenvalues			Extraction Sums of Squared L		
	Total	% of Varian	Cumulative	Total	% of Varian	Cumulative
1	12.99	54.15	54.15	12.99	54.15	54.15
2	1.473	6.136	60.28	1.473	6.136	60.28
3	1.196	4.982	65.27	1.196	4.982	65.27
4	1.138	4.742	70.01	1.138	4.742	70.01
5	.963	4.013	74.02			
6	.791	3.297	77.32			
7	.632	2.633	79.95			
8	.605	2.520	82.47			
9	.548	2.281	84.75			
10	.470	1.957	86.71			
11	.444	1.848	88.56			
12	.406	1.691	90.25			
13	.383	1.596	91.85			
14	.335	1.397	93.24			
15	.277	1.156	94.40			
16	.262	1.091	95.49			
17	.243	1.013	96.50			
18	.206	.859	97.36			
19	.171	.714	98.07			
20	.145	.604	98.68			
21	.127	.529	99.21			
22	8.206E-0	.342	99.55			
23	5.760E-0	.240	99.79			
24	4.954E-0	.206	100.00			

Extraction Method: Principal Component Analysis.

a. FORM = 1.00

Table 5.14 : Scree Plot Form 1

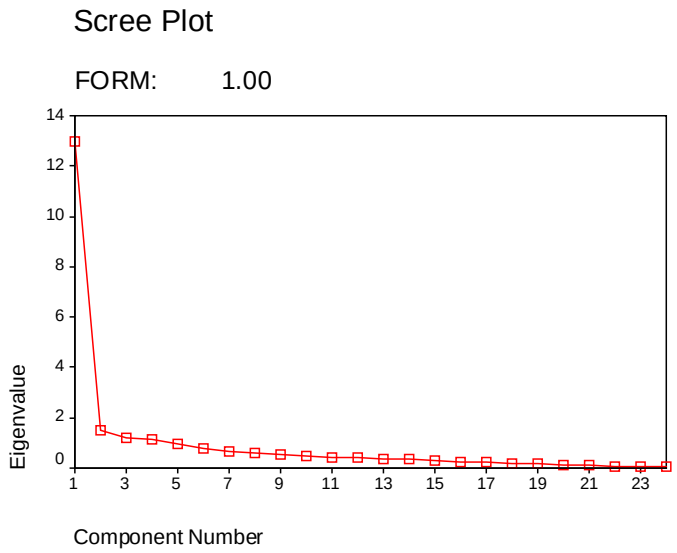


Table 5.15 : Component Matrix Unrotated Form 1

Component Matrix[a,b]

	Component			
	1	2	3	4
J1	.758	-.365	-4.65E-02	-2.93E-02
J2	.752	-5.58E-02	.269	-.168
J3	.783	-.125	8.822E-02	-7.28E-02
J4	.783	-.187	.233	-.104
J5	.680	-.258	.229	-6.17E-02
J6	.738	.267	.262	-.114
J7	.773	3.179E-02	.245	-.228
J8	.810	-.161	9.815E-02	-.151
J9	.575	-.381	3.759E-03	.513
J10	.811	-7.12E-02	-.248	-7.75E-02
J11	.522	.532	.366	.102
J12	.836	-1.81E-02	4.746E-02	-.118
J13	.738	.110	-.283	.270
J14	.656	.529	-.136	.118
J15	.792	-.175	-.131	-2.28E-02
J16	.724	-2.80E-02	-.149	5.763E-02
J17	.816	-6.78E-02	.225	5.992E-02
J18	.515	-.251	.266	.570
J19	.699	.361	6.413E-02	.111
J20	.787	-2.11E-02	-.270	-.109
J21	.676	.291	-.223	.421
J22	.737	-.107	-.346	-.156
J23	.822	3.013E-02	-.404	-.193
J24	.756	.261	3.426E-02	-.159

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

b. FORM = 1.00

Table 5.16 : Component Matrix Varimax Rotation Form 1

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
J1	.570	.510	-3.01E-03	.354
J2	.711	.248	.285	.146
J3	.606	.403	.228	.243
J4	.721	.297	.194	.259
J5	.657	.240	9.801E-02	.291
J6	.573	.211	.567	5.658E-02
J7	.710	.280	.352	6.376E-02
J8	.676	.425	.192	.201
J9	.243	.290	3.640E-02	.770
J10	.421	.684	.224	.186
J11	.317	-4.87E-02	.768	7.768E-02
J12	.604	.464	.324	.173
J13	.143	.607	.419	.381
J14	.113	.428	.735	7.380E-02
J15	.482	.581	.161	.282
J16	.348	.533	.272	.268
J17	.626	.290	.346	.360
J18	.288	2.732E-02	.183	.779
J19	.307	.308	.645	.174
J20	.393	.688	.245	.129
J21	1.308E-02	.487	.593	.424
J22	.367	.733	.125	9.837E-02
J23	.362	.823	.261	3.146E-02
J24	.479	.411	.518	-1.75E-03

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

b. FORM = 1.00

Similar results were found for Form 2. As can be seen from Table 5.17, five factors with eigenvalues larger than 1 were initially extracted on the basis of Kaiser's criterion. The first factor accounted for 47.28% of the variance, the second factor for 5.54% (53.8% cumulative), the third for 5.33% (59.16% cumulative), the fourth for 4.74% (63.90% cumulative), and the fifth for 4.38% (68.28 cumulative). The scree plot (Table 5.18) has one sharp direction change, indicating a possible two factor solution.

The unrotated component matrix (Table 5.19) indicates that all the items are loading most heavily onto Factor 1, except for item 12, which is loading onto Factor 2. Despite this, these items are still loading very significantly onto Factor 1. The rotated component matrix (varimax rotation) (Table 5.20) indicates that once again all the items are loading onto Factor 1. However the majority of the items are loading in on all five factors, with the rest loading in on at least three of the factors.

As with Form 1, there is a clear indication that a 1-factor solution may be the most appropriate for this instrument. The first factor is accounting for a satisfactory amount of the variance (47.28). The scree-plot supports a solution with fewer factors, as there is only one significant direction change. With regards to the factor loadings, the unrotated solution indicates that all the items are loading onto Factor 1. The rotated solution is also indicating that all the items load into Factor 1, and that given that all the items are loading in across most of the factors, the other four factors are not easily distinguishable from one another or from factor one. This is in line with the scale development in that it supports a one factor, global organisational justice perception.

Table 5.17 : Factor Extraction with Kaiser's Criterion for Form 2 (Pilot study)

Total Variance Explained[a]

Compone	Initial Eigenvalues			Extraction Sums of Squared L		
	Total	% of Variar	Cumulative	Total	% of Variar	Cumulative
1	11.348	47.282	47.282	11.348	47.282	47.282
2	1.570	6.543	53.825	1.570	6.543	53.825
3	1.281	5.337	59.162	1.281	5.337	59.162
4	1.138	4.740	63.902	1.138	4.740	63.902
5	1.051	4.380	68.282	1.051	4.380	68.282
6	.883	3.680	71.962			
7	.810	3.375	75.337			
8	.751	3.128	78.465			
9	.669	2.789	81.254			
10	.601	2.506	83.760			
11	.558	2.326	86.086			
12	.490	2.043	88.129			
13	.441	1.838	89.967			
14	.407	1.696	91.663			
15	.355	1.479	93.142			
16	.282	1.174	94.316			
17	.252	1.052	95.367			
18	.225	.938	96.305			
19	.216	.899	97.204			
20	.187	.778	97.982			
21	.177	.738	98.720			
22	.132	.549	99.269			
23	9.842E-0	.410	99.679			
24	7.707E-0	.321	100.000			

Extraction Method: Principal Component Analysis.

a.FORM = 2.00

Table 5.18 : Scree Plot for Form 2

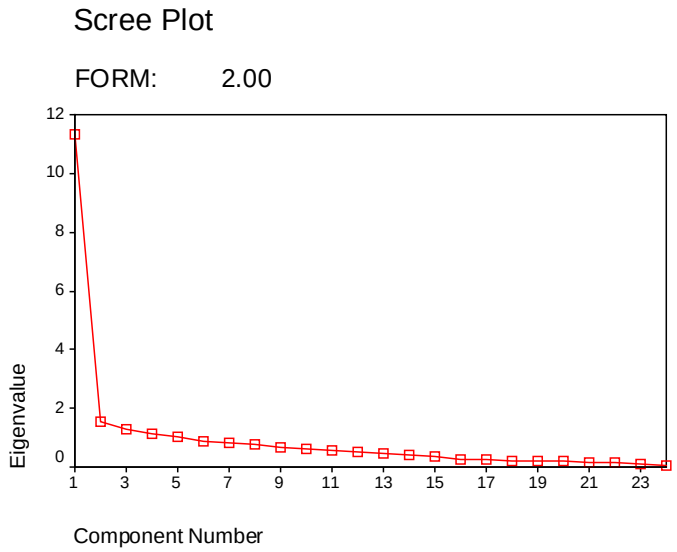


Table 5.19 : Component Matrix Unrotated Form 2

Component Matrix[a,b]

	Component				
	1	2	3	4	5
J1	.605	3.289E-02	-.133	.190	-3.38E-02
J2	.725	-.181	-.251	8.054E-02	.117
J3	.608	-.402	-.249	.257	.337
J4	.744	6.613E-02	.251	.147	-7.20E-02
J5	.762	-9.23E-02	-.173	-4.61E-02	5.022E-02
J6	.691	-8.37E-02	-.351	.198	6.418E-02
J7	.619	.181	.503	.245	.283
J8	.554	.105	6.556E-02	.430	-.508
J9	.766	5.678E-02	-.179	-1.72E-02	-.268
J10	.798	4.182E-02	-3.78E-02	-7.87E-02	-.325
J11	.643	.314	.217	.211	-5.82E-02
J12	.448	.658	-.216	-7.19E-02	.258
J13	.767	.151	-.252	-.163	-.101
J14	.702	.269	.233	-8.12E-02	.193
J15	.625	.413	-.192	-.403	.172
J16	.731	-9.60E-02	.128	-.232	2.497E-02
J17	.645	-.415	.189	8.720E-02	.152
J18	.626	-.371	.423	-.311	5.487E-02
J19	.615	-.326	1.267E-03	-.422	-.140
J20	.654	6.098E-02	8.384E-02	-.203	-.383
J21	.701	.161	.231	-4.18E-02	.182
J22	.801	-.130	7.949E-02	-4.31E-02	-4.65E-02
J23	.748	-.192	-.289	6.827E-03	.143
J24	.795	-5.10E-03	-2.28E-02	.296	2.196E-02

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

b. FORM = 2.00

Table 5.20 : Component Matrix Varimax Rotation Form 2

Rotated Component Matrix[a,b]

	Component				
	1	2	3	4	5
J1	.438	.102	.213	.368	.198
J2	.674	.268	.154	.220	.208
J3	.844	.147	.197	5.140E-03	-1.74E-02
J4	.272	.292	.529	.435	.141
J5	.548	.368	.180	.261	.294
J6	.686	.111	.106	.313	.242
J7	.181	.117	.852	.144	.126
J8	.192	1.829E-02	.244	.816	-4.53E-02
J9	.387	.342	9.673E-02	.561	.323
J10	.296	.454	.168	.590	.284
J11	.153	8.055E-02	.542	.457	.273
J12	.133	-.134	.255	.112	.799
J13	.392	.354	8.384E-02	.400	.515
J14	.184	.291	.574	.170	.433
J15	.182	.308	.155	8.991E-02	.793
J16	.304	.572	.317	.191	.243
J17	.520	.440	.403	9.103E-02	-.145
J18	.198	.772	.412	2.287E-02	-6.14E-02
J19	.285	.748	1.126E-03	.163	.124
J20	8.308E-02	.510	.138	.530	.242
J21	.242	.311	.556	.169	.336
J22	.423	.486	.335	.339	.166
J23	.695	.320	.120	.182	.258
J24	.557	.151	.419	.429	.166

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

b. FORM = 2.00

A t-test was conducted in order to establish whether there was a significant difference between the mean scores of those who answered form 1 and those who answered form 2. As can be seen from Table 5.21 , results indicated that there was no significant difference between the means of group 1 (those who filled in Form 1) and group two (those who filled in Form 2).

The results of the pilot study indicate a scale that is both reliable and valid. From the reliability analysis it can be seen that both versions of the scale have sufficiently high Cronbach Alphas. As such there is a high internal consistency across the items in the scale. It can also be seen that there are no items that correlate negatively and no significantly low item-total correlations. As such it is clear that the scale has sufficient reliability for use in the study. With regards to the factor analysis, in both form 1 and form 2, a one-factor solution is indicated. This is in line with the development of the scale, where an attempt was made to measure global justice perceptions, rather than any number of justice dimensions. As such a one-factor solution indicates that the scale is in fact measuring one this one underlying justice construct. The t-test results indicated that there was no significant difference between the mean score of group 1 and the mean score of group 2. In addition to this the reliability and validity results seem to be replicating themselves across the two versions of the questionnaire. This means that there appears to be no order effect with regards to the completion of the scale.

Given the satisfactory reliability and validity results, as well as the stability of results across the two forms, this scale proved to be suitable for the purposes of the current

T-Test

study, and was used in the main study. This marks an important deviation from research trends in this area, which have relied on the tripartite justice model to explore perceptions of justice.

As can be seen from the above discussion the current research has attempted to address some of the methodological concerns articulated in the preceding chapters through the definition and measurement of the variables under discussion. An extensive demographic blank that looks at a wide range of variables and measures them in a holistic and in-depth way was developed, and an appropriate social justice perceptions measure source. Further to that a global organisational justice perceptions scale was developed and validated, allowing for a more open and undetermined exploration of justice perceptions. As mentioned previously, the arguments laid out in the first half of this report proposed two sets of methodological challenges for the current study, the measuring instruments being only the first. A second set of considerations was how the data, once collected, is to be analysed.

Statistical Analysis

As discussed earlier in this chapter and in the preceding chapters most studies of justice make use of statistical tools that rely on the reduction of variables into limited categories and indices to analyse data. It was argued that if thinking about justice is to become more systemic and nuanced as is argued for in chapters two and three, research methodologies that extend beyond linear thinking are needed. Methods of analysis that

attempt to work with the complexity of the variables rather than relying on the reduction of variables is required. In addition to this statistical procedures that account for the interaction of variables need to be used, rather than simply looking at more directly linear relationships. It is these considerations that informed the choice of statistical tools in the current study. The following paragraphs will describe the ways in which the data was analysed, starting off with the preliminary analyses that were done in order to explore the structure and properties of the data set.

Firstly, in order to establish the psychometric properties of the measuring instruments Cronbach Alphas and factor analyses were conducted on the scales. The distributions of the different variables were then explored in order to test for normality as well as to identify the possibility of outliers. Following this, descriptive statistics were used in order to explore and describe the data set. Correlations were then used to explore the relationship between the variables.

Once the data set had been fully described and explored, the following steps were taken in order to attempt to answer the research questions:

1. Cluster analyses were conducted on each of the justice variables
2. The clusters were described in terms of profiles of justice responses (i.e. mean scores for each item of the scale for each variable)
3. A CHAID analysis was conducted in order to explore whether demographic variables were predicting cluster membership for each of the justice variables (i.e. the demographic variables were the predictors, and organisational justice

perceptions and social justice perceptions were the dependent variables respectively).

These statistical procedures are different from more conventional data analysis methods described in the preceding chapters in that they do not make use of total scores or single score indices, but rather analyse scoring profiles (i.e. peoples responses for each item), taking into account responses to each question answered. Furthermore they account for the interactions between a wide range of variables, rather than focusing on single or a limited number of interactions. All of the above procedures will be discussed in more detail.

An evaluation of the scale and the sub scales used in the present study was necessary before any results could be established. As such the reliability and validity of the measuring instrument had to be considered. Reliability refers to the extent to which the scale is consistently measuring the instrument at hand, whereas validity refers to the extent to which the instrument is measuring what it is supposed to measure (Anastasi, 1976). Internal reliability measures assess the homogeneity of test items (Anastasi, 1976), or the extent to which items on a given scale correlate with each other (Rosenthal & Rosnow, 1991). The higher the inter item correlation, the more consistently the scale is measuring the same construct. The internal reliabilities of the scale and sub scales used in the current research were calculated using Cronbach's alpha. A Cronbach's alpha coefficient of 0.60 and above is regarded by some authors as acceptable for the

Social Sciences (McKennell, 1970), while others maintain that 0.70 is a more acceptable cut off point (Kerlinger, 1986).

Validity refers to the extent to which a scale measures what it is supposed to measure. Construct validity is the extent to which the scale actually captures the theoretical construct or trait that it is supposed to measure (Anastasi, 1976, Rosenthal & Rosnow, 1991). Factor analysis is one of the most common statistical measures of construct validity. The purpose of factor analysis is to describe relationships among many variables in terms of a few underlying quantities termed factors (Johnson & Wichern, 1998). It is defined as a method for the simplification of more complex sets of data (Kline, 1994). A factor is a grouping of variables that have a high correlation with one another but a low correlation with variables in another group - it is a construct which is the 'condensed statement' of the relationships between a group of variables (Royce, 1963). As such factor analysis can account for the relationships between variables, and can be useful in discovering the main dimensions or constructs that underpin a set of variables (Kline, 1994). As such it is a useful tool for exploring the construct validity of a measuring instrument – to ascertain the underlying relationship between a set of items attempting to represent a particular construct.

A factor is defined by its factor loadings – the correlation of a variable with that factor. A factor analysis will derive a number of factors, but the meaning of that factor can only be deduced from an exploration of the factor loadings i.e. which variables are correlating most strongly with the different factors. The meaning of these factors must then be

validated against external criteria, for example the theoretical underpinnings of a particular construct, or previous research in the area (Kline, 1994). In this way the results of a factor analysis must be interpreted within the context of the study and the theoretical field. A factor loading is considered high if it is 0.6 or above, and is moderately high if it is 0.3 or above (Kline, 1994). Kline (1994) argues that a factor loading below 0.3 should be ignored, however many statisticians find such a cut-off to be too rigorous (Cattell, 1978). Cattell (1978) regards loadings from 0.15 and above significant.

A distinction is made between exploratory and confirmatory factor analysis, with the former being a method of investigating the underlying structure of a set of variables, and the latter being a method of testing hypotheses (Kline, 1994). In the current study factor analysis is used in its exploratory sense, in order to investigate the structure and construct validity of the measurement instruments. Principal component analysis is one method of condensing a correlation matrix and a set of variables, and is the method used in the current study. The aim of this method of factor analysis is to be able to estimate the correlation matrix by finding the characteristic equation of the matrix (Kline, 1994). This is done by deriving two sets of values, that of the eigenvectors (a column of weights each applicable to a variable in the matrix and from which the factor loadings are derived) and the eigenvalues (a value reflecting the proportion of variance explained by each factor). The eigenvalue of a component, a value that is always positive or zero, is an indication of the proportion of total variance that component accounts for (Kline, 1994). As such the larger the eigenvalue of the factor, the more variance it accounts for.

In a Principal Component Analysis, principal components emerge in the order of the highest proportion of variance explained by each component. Principal components maximise the amount of variance explained by the factors – no other method of extraction could produce factors that will account for more variance than the principal components. The number of eigenvalues represents the number of components needed to explain the relationships between the variables. In Principal Component analysis there are as many eigenvalues as there are variables, with the eigenvalues becoming smaller lower down the list, but eventually accounting for all of the variance. Much of what is initially produced in a factor analysis is an artifact of the statistical methods used – for example Principal Component Analysis will generally produce one general factor, followed by bipolar factors (Kline, 1994). Because the factors may be algebraic artifacts, they must be simplified by a process of rotation in order to be meaningfully interpreted.

The process of rotation is best understood if one imagines factors in relation to the notion of Euclidean space, where a set of axis (representing different factors and along which factor loadings are indicated) form four quadrants. Variables can fall into any of the four quadrants. By rotating the axes (which can hold any point in this space) variables will load differently onto the factors i.e. factor loadings, and thus the meaning of the factors, will change. In this way it becomes clear that there is no one perfect or correct factor analysis solution. There are two types of rotation, orthogonal and oblique. Orthogonal rotation keeps the axes at a 90-degree angle to one another, meaning that the rotated factors are not correlated to one another. Oblique rotation, on the other hand,

allows the axes to take up any position in space relative to one another, where the angle between the axes indicates the correlation between the factors. There is almost an infinity of mathematically equivalent sets of factors as the axes, or factors, can be rotated into any position relative to one another, and each rotation or new position would present new factor loadings. (Kline, 1994). However, each of these solutions is mathematically equivalent, as they will explain the same amount of variance in each variable. As such there is no mathematical argument for choosing one solution (even the initial unrotated solution) over another. However it is argued that there is a rational basis for choosing a solution, and that this is based on the law of parsimony (Kline,1994). This law states that one should select the simplest explanation of those that fit the facts i.e. it makes sense to pick the most simple solution from the infinite number of rotations. This provides the rationale for the criteria of simple structure for the rotation of factors, where the optimum solution is where the factors in a given matrix each have a few high loadings. As such a simple structure method of rotating factors will attempt to maximise the number of zero (or near zero) factor loadings (Cattell, 1978). Varimax rotation, an orthogonal rotation method, aims at obtaining a simple structure by maximising the sum of variances of squared loadings, producing loadings which are either high or near to zero. Kline (1994) states that it is generally agreed that the Varimax procedure is the most efficient procedure for obtaining simple structure with orthogonal rotation. As such, this is the method of rotation used in the current study.

Catell (1978) suggested a number of technical rules for simple structure factor analysis. These include a good rationale for the inclusion of the variables or items (and not

omitting any important aspects of the construct), a heterogeneous, representative sample, a sample size of at least 100 subjects , a variable to subject ratio of at least 2:1 (although the bigger the ratio of subjects to items the better), an appropriate method of factor analysis (such as principal component analysis), and finally the appropriate choice of the number of factors to be rotated. With regards to the first four rules, this study meets the established criteria. The scale items all have a clear, theoretical rationale, the sample size is 467, the subject to variable ratio is approximately 20:1 for the organisational justice scale, and approximately 23:1 for the belief in a just world scale. The sample is heterogeneous, representing a wide range of people, and as discussed above, principal component analysis is a suitable method of factor analysis for this study.

With regards to the last rule, that of deciding how many factors to retain for rotation, this decision can only be made after conducting the principal component analysis. Once this is done, two criteria need to be considered. The first is the eigenvalue of each factor. Kline 91994) states that it is standard practice for factors with an eigenvalue of larger than 1 to be retained. He argues, however, that this often greatly over estimates the number of factors, particularly in large matrices. The second criteria is that of a Scree test, which Kline (1994) argues is possibly the best indicator of the appropriate number of factors to retain. In the Scree test a plot is made with the eigenvalues and the principal components. The cutoff point each factor is where the line changes slope. As such, by looking at the number of slope changes in the Scree plot, one can deduce the number of factors to be retained. One criticism of the Scree test is that it is subjective. As such

Kline recommends that the Scree test is looked at in conjunction with the eigenvalues of the factors.

Once the validity and reliability of the measuring instruments was established, a number of analyses were carried out in order to explore and describe the data set. The means (averages), frequencies (number of occurrences) and percentages of all biographical data were calculated in order to enable the researcher to classify and describe the current sample. The means to the scales and sub scales were also calculated, allowing the researcher to establish the average overall response to the measures.

Once these preliminary analyses were done, the data was analysed in order to answer the research questions. The first question that was explored pertained to the relationship between organisational and social justice perceptions i.e. Are people's experiences of organisational justice related to their experiences of social justice? In order to answer this question Pearsons-Product Moment Correlations were used. Correlations indicate the degree to which two variables are related (Runyon and Haber, 1976; Howell, 1992). Rosenthal and Rosnow (1991) describe a linear relationship as one where a fixed change in one variable is always associated with a fixed change in another variable. A correlational analysis is a technique that allows for the directionality and degree of linear relationships between two variables to be established. (McCall, 1990). A correlation co-efficient (a unitless measure) is a number from –1.00 through to +1.00, which reflects the nature of the linear relationship. 0.00 indicates no relationship, with –1.00 reflecting a perfect negative relationship and +1.00 a perfect positive one (Kerlinger, 1986). As

such by performing a correlation analysis on organisational and social justice, information about the relationship between these two dimensions could be gleaned. This will provide the point of departure for further discussion on the basis of the other statistical analyses being performed. While these are being conducted most primarily in order to answer the other two research questions, they will also be able to add some more information about the relationship between these two dimensions of justice. This will be discussed in more detail further on in this chapter.

The second question to be explored was the one that asked : In what ways do people cluster together in relation to their experiences of justice? As mentioned previously, techniques needed to be employed that could work with the complexity of the data set, with as little unnecessary reduction of the data as possible. In order to do this a cluster analysis will be used. Typically, cluster analysis is used to develop classification systems, investigate conceptual frameworks for grouping variables, generate hypotheses through the exploration of data, or to test hypotheses by determining the presence of clusters or types defined through other procedures. (Aldenderfer & Blashfield, 1984). Cluster analysis is a broad term used to refer to a range of clustering methods (multivariate statistical procedures) that are used to organise sets of data into highly similar, relatively homogenous groups. Such homogenous groups of cases are referred to as clusters (Aldenderfer & Blashfield, 1984). For the purposes of this research, social and organisational justice perceptions will be subject to a clustering procedure and analysis, in order to determine whether groups of people with similar perceptions emerge.

It is important to note that cluster analysis works at an individual item level, and can be used to cluster any type of variable. For example variables such as cities could be clustered on the basis of a number of descriptive features. As such the 'scales' used in the current study need to be understood simply as a series of statements. They will not be used in an additive manner, and each item stands on its own. As such the psychometric properties of such 'scales' are not relevant to this analysis.

There are five basic steps involved in a cluster analysis, all of which involve choosing from an array of possible techniques and measurements. Different clustering methods will generate different solutions for the same data set. Therefore in order to make the cluster analysis meaningful, it is essential that one chooses the most appropriate methods for the purposes of the given study (Aldenderfer & Blashfield, 1984). The first two steps involve selecting the sample for the analysis and defining the variables on which the cases in the sample will be measured. In the present study both these matters have been guided by the literature and the research questions, and have been discussed earlier on in this chapter. An additional note in relation to these first two steps, regarding the transformation of data, is important at this juncture. Where the normality of the distribution is in question, or where the data does not have the same scale value, it is common to perform a transformation of the data or standardise it to a mean of 0 and a unit variance (Aldenderfer & Blashfield, 1984). When performing a cluster method, however, such a procedure is considered inappropriate. Standardisation may reduce the very differences that the clustering method is attempting to determine (Everitt, 1980 in

Aldenderfer & Blashfield, 1984). As such, no standardisation procedures will be performed on the data for the present study.

The third step in a cluster analysis entails computing the similarities among the cases. Similarity between profiles can be assessed on the basis of the *shape* of the profile, the way in which scores are dispersed around the average (known as *scatter*), or the mean score of the case across all the variables (*elevation*) (Aldenderfer & Blashfield, 1984). There are a number of different similarity measures that can be used, each of which is sensitive to different properties of the profile. The choice of similarity measure is based on the strengths and limitations of each measure in relation to the study being done, as well as the properties of the data. In the present study, the initial clustering will be done on the basis of justice perceptions. The scale being used to measure this variable will yield data that is, arguably, ratio data (while a Likert type scale does generate categorical data for each item, a total of the scores for all the items – a scale total – can arguably constitute ratio data). Of the similarity measures that are considered appropriate for this type of data, distance measures have enjoyed a great deal of popularity (Aldenderfer & Blashfield, 1984). Unlike correlation co-efficients which are sensitive to the shape of profiles but not to the magnitude of such profiles – a drawback that is considerable given the nature of this study – distance measures use the magnitude of variables to determine their distance from one another. Cases that are described by variables with the same magnitude will be considered identical (Aldenderfer & Blashfield, 1984). One of the biggest problems effecting the popularity of this type of similarity measure is that it is affected by the standardisation of variables. As no standardisation procedure will be

used in this study, this need not present a concern. Another problem with this type of measure is that it is effected by elevation differences, such that variables with big size differences and standard deviations may overshadow the effects of other variables with smaller differences (Aldenderfer & Blashfield, 1984). Despite this, distance measures appear to be the most appropriate similarity measure for the purposes of this study.

The fourth step in a cluster analysis is to use a cluster method to form groups of similar cases. Of the number of families of methods to choose from, hierarchical agglomerative methods are the most frequently used (Aldenderfer & Blashfield, 1984). Such methods start off by finding the two most similar cases, and sequentially add the most similar cases, forming different clusters at various levels of similarity, until one large cluster is formed at the end of the process. This sequence is depicted in a graph called a dendrogram, which graphically displays the hierarchical structure of the clustering. The clusters do not overlap (i.e. each case will appear in only one cluster), but the clusters are nested (i.e. are part of more inclusive clusters at higher levels of similarity). Hierarchical agglomeration is based on a set of merger rules or linkage forms, which determine when cases should be combined. There are a number of different sets of merger rules that can be applied depending on the nature of the study and the research questions. These merger strategies can be compared by observing how they effect the 'space' between groups in the data i.e. do they reduce the space between groups (space-contracting methods) or increase such a space (space-dilating methods). While some authors prefer space-contracting methods because they possess desirable mathematical properties (Jardine & Sibson, 1968 in Aldenderfer & Blashfield, 1984) others consider

them to limit the application of the analysis, and therefore prefer space-dilating methods (Williams, 1971 in Aldenderfer & Blashfield, 1984). As the application of the analysis is of primary importance in this study, space-dilating methods would be most appropriate. Ward's Method is a space-dilating technique that is widely used in the social sciences. This method optimises the minimum variance within the clusters, a function known as the error sum of squares. At the beginning of the sequence, each case is in its own cluster and therefore the error sum of squares is zero. Cases are joined on the basis that they result in the minimum increase in the error sum of squares. A concern with such a method is that it is effected by elevation profiles.

A number of comparisons between similarity measures and clustering methods have been conducted in order to determine what factors effect the performance of such methods. Given the exploratory nature of the research questions, the properties of the scales being used in this study, the applied nature of the research, as well as the non-linear nature of the relationships between variables, Ward's method of clustering with a distance measure of similarity is the most appropriate clustering method to use. It is impossible to say which clustering method would be the correct one to use, as there can be no correct clustering solution. Instead one needs to determine the appropriateness of the method being used in relation to the nature of the data and the study.

As can be seen a cluster analysis makes use of all of a respondents answers, working on the basis of profiles of responses, rather than the reduction of a set of questions into one index. This will allow for a more in depth and nuanced exploration of justice perceptions

than the methods more conventionally used by justice researchers (as described in chapters two, three and four). The reasons for this are best illustrated through an example. On a five item scale scored on a 5-point Likert scale, respondent A answers strongly disagree (i.e. ticks 1) in response to question one and two, neither agree nor disagree (i.e. ticks a 3) for question three, agree (i.e. ticks a 4) for question four, and strongly agree (i.e. ticks a 5) for the fifth question. Respondent A would thus score a total of 14 out of possible 25, and would fall into the category of having moderate justice perceptions. Respondent B, on the other hand might score exactly the opposite, answering a 5 for question one, a 4 for question two, a 3 for question three, and a 1 for questions four and five. Respondent B, despite having very disparate views from respondent A, would also score a 14 and be classified as having moderate perceptions. In many analyses (such as regression analyses, correlations, ANOVAs and MANOVAs) these two people would be recognised as being identical. A cluster analysis, however, because it works with profiles of responses, would recognise these two people as holding very different perceptions.

While this has clear advantages, a cluster analysis is, to some extent, descriptive in nature – it will explore the ways in which people are similar or different from eachother in relation to their justice perceptions, but it will not identify relationships between variables. As discussed above, this is interesting in itself in that it might allow alternate conceptions of justice concerns to emerge. However in order to use this procedure to understand or predict the relationship between variables (in this case between justice perceptions and demographic variables), further analyses using the clustering solution

need to be conducted. In the current study this takes the form of a data mining technique. Data Mining is an analytic process designed to explore large amounts of data (most typically business or market related data). The aim of such an exploration is to search for consistent patterns and systematic relationships between variables, and then to validate the findings by applying the detected patterns to new subsets of data. The ultimate goal of data mining is prediction – in the current study this would apply to the final research question: do demographic variables predict experiences of organisational and social justice? As predictive data mining is the most common type of data mining and one that has the most direct business applications, there has been recent increased interest in developing new analytic techniques specifically designed to address the issues relevant to business Data Mining. One such development is that of Classification Trees.

A classification tree is a method of hierarchically sorting data and is used in the current study in order to predict membership of the cluster groups on the basis of the demographic variables. Classification trees are different from traditional statistical methods for predicting group or cluster membership on a categorical dependent variable as they employ a hierarchy of predictions, with many predictions sometimes being applied to particular cases. Traditional methods use simultaneous techniques to make one and only one class membership prediction for each and every case. Classification trees are hierarchical in nature i.e. a hierarchy of questions are asked, and the final decision depends on the answers to all the questions that preceded it (STATISTICA manual, 2003). There are a number of different classification tree tools. The one used in the current study is called Chi-square Automatic Interaction Detection, or CHAID.

CHAID is a classification trees program developed by Kass (1980) that performs multi-level splits when computing classification trees (STATISTICA manual, 2003). It is a technique used for the classification of data. CHAID evaluates complex interactions among predictors, and displays the results in the form of a 'tree' diagram. This technique is appropriate for a data set where there is one dependent variable, and many categorical predictors that may or may not be ordinal (Kass, 1980), such as the data set in the current study. It partitions the data into mutually exclusive, exhaustive groupings that best describe the dependent variable (Kass, 1980). In the case of the current study the independent variables are the host of demographic variables, while the dependent variable is justice perceptions (both organisational and social). However instead of justice perceptions being analysed in the form of scale totals, they are looked at in relation to the cluster memberships that emerge from the cluster analysis. In other words the CHAID will be used in order to explore how the demographic variables describe justice perceptions cluster membership.

CHAID has its origins in the automatic interaction detection (AID) technique, where data is bisected using the predictors. AID is used when the dependent variable is interval in nature, and it maximises the between-group sum of squares at each bisection (Kass, 1980). CHAID, on the other hand, operates where the dependent variable is nominal, and it maximises the significance of the chi-squared statistic at each partition. With CHAID, the division does not have to be a bisection (Kass, 1980), rather CHAID performs multi-level splits rather than binary splits when computing classification trees.

With multi-level splits, predictor variables can be used for splitting only once (STATISTICA Manual, 2003). There are a number of steps in a CHAID analysis. Firstly the best partition for each predictor is found. For example in the current study, age may be partitioned on the basis of those older than 30 and those younger than 30, or salary between those who earn more than R3000 a month and those who earn less. The second step is to compare the predictors to each other and then select the one that best predicts the dependent variable. The data is then divided according to the predictor. Each sub-group is then reanalysed independently, and further divisions are produced (Kass, 1980).

For example, CHAID might identify age as the first predictor of justice perceptions, with people above thirty falling into one group and people below thirty falling into the other. Within each of these groups cluster memberships will be identified e.g. of all of the people under the age of thirty, 50% were in cluster one, 25% in cluster two, 10% in clusters three and four, and only 5% in cluster 6. In the over thirties however, only 2% are in cluster 1, 10% in clusters two, three, and four, and the remaining 68% are in cluster six. There is a clear indication that cluster one (which may be defined, for example, as a group of people who have low justice perceptions in relation to industrial relations and organisational communication, but high perceptions about selection and training and development) has an overwhelmingly high number of the under thirties, while cluster six has a high number of the over thirties (people who have moderate justice perceptions about selection and training and development, but very high perceptions about industrial relations and organisational structure). These two groups are then reanalysed. For the first group union membership might then be the next best

predictor of justice, with those belonging to a union falling into one group and those who do not into another. This means that group one now comprises group 1A - all the people under the age of thirty who do belong to a union, and group 1B – all the people under the age of thirty who do not belong to a union. Similarly group two would be split on the basis of its next predictor, say gender, into all of those who are over the age of thirty and who are female, and those who are over the age of thirty and male. And so the analysis proceeds.

The CHAID modeling results are displayed in a tree diagram. The "trunk" of the tree represents the total modeling database. CHAID then creates a first layer of "branches" by displaying values of the strongest predictor of the dependent variable. CHAID automatically determines how to group the values of this predictor into a manageable number of categories. (E.g., we may start with ten categories of age, and CHAID might collapse these ten categories down to only four or five statistically significantly different age groups.) CHAID then creates additional layers of branches off of each age grouping, using the strongest of the remaining predictors. It continues this branching procedure until the final branches or "twigs" of the tree have been generated.

CHAID thus is a useful tool for dividing data into more homogenous groups (Kass, 1980) while still retaining the richness of information. It is particularly appropriate for use in this study in that it looks at the interactions between the demographic variables rather than seeing each one in isolation from the others, and it can analyse an unlimited number of such variables. As such there is no need to reduce the number of demographic

variables under investigation – which is particularly useful given the exploratory nature of the study – or to use limited indices of demographic variables. This addresses a number of the concerns articulated in the preceding chapters and in the beginning of this chapter.

Concluding Remarks

As can be seen from the above discussion, the approach to the current study is inflected with concerns and arguments raised in the first half of this report. Theoretical concerns related to the relationship between different types of justice as well as the relationship between demographic variables (as indicators of ~~identity and~~ social position) and perceptions of justice have informed the research questions being investigated. Further, concerns about the way in which social psychologists investigate questions about justice and demographic variables have directed the methodological approach of the current study. This is particularly in relation to the way in which the variables under consideration are being defined and measured, as well as the types of statistical tools employed to analyse the data.

This chapter outlined the ways in which the current study aims to address the concerns raised by detailing both the research questions as well as the methodological approach to be adopted. By empirically exploring the relationship between organisational and social justice as well as the relationship between demographic variables and perceptions of justice, this study is addressing important theoretical considerations. With regards to methodological issues, by conducting a field study with a large and diverse sample of

employed people with varied work, domestic, financial and religious backgrounds, this study avoids the limitations of experimental laboratory-based research using largely homogenous samples of university students that is so prolific within the area of justice research. Further, by including a wide range of demographic variables that are measured using a number of different indices, this study avoids the kind of reductionism that has been evident in other studies exploring aspects of demography and justice perceptions. In this way the relationship between demographic variables and justice perceptions can be more fully explored in such a way that the complexities of ~~identity and~~ social position can be accounted for. Similarly, the way in which justice perceptions are measured in this study – that is globally rather than in relation to the tripartite structure - avoids the limitations of working within one framework that has, arguably, become restrictive rather than informative.

Finally, statistical procedures that can assist a better understanding of the complexities of the variables under study were identified and described, namely cluster and CHAID analyses. By using tools that firstly, do not rely on the reduction of variables into a small number of categories or single indices, and secondly are aimed at exploring the interactions between a large number of variables, this study is arguably moving beyond a linear understanding of the relationship between the variables. Further, such an approach accounts for more of the complexities involved in such relationships than other more conventional approaches.

The results of the statistical analyses described above are presented in the following chapter.

Table 5.21: T-Test Form 1 and 2

Group Statistics

	FORM	N	Mean	Std. Deviation	Std. Error Mean
JUSTTOT	1.00	90	70.1778	19.09031	2.01230
	2.00	94	69.3298	17.77602	1.83346

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
JUSTTOT	Equal variances assumed	.182	.670	.312	182	.755	.8480	2.71806	-4.51497	6.21095
	Equal variances not assumed			.311	179.632	.756	.8480	2.72230	-4.52380	6.21978

Chapter 6: Results

Overview

The results of the statistical analysis carried out for the current research are presented in the following chapter. As discussed in Chapter 5, the analyses are conducted in a number of steps. First the psychometric properties of the scales are explored, and Cronbach Alphas and factor analyses are presented for each measure. As will become evident, the belief in a just world scale presented a problem with regards to reliability, and as such needed to be explored in more depth. Following a factor analysis it was decided to divide this scale up into two separate measures, that of a social justice perceptions scale and a social injustice perceptions scale. As such three justice variables were carried forward for all the other analyses. Following the exploration of the measuring instruments, the data set is explored, with descriptive summary statistics being presented, followed by distribution analyses for each set of measures. As will be seen, two of the distributions, that of social justice perceptions and social injustice perceptions, do not meet the assumption of normality required for parametric analyses in that they were both slightly skewed. As such, where necessary, non-parametric equivalent procedures are used.

Once the preliminary analyses are complete, focus turns to answering the main research questions. Firstly a correlation analysis is conducted in order to explore the relationship between organisational and social justice perceptions (with social justice perceptions now comprising two independent measures). The next stage in the analysis is a cluster analysis, which is conducted on each of the dependent variables. The first step is to determine how many clusters should be retained from the analysis. To this end a cluster history diagram and a dendrogram are presented. These represent (the first in table form, the second

diagrammatically) where the cluster breaks are occurring and how many people are in each cluster, starting with one large cluster and ending ultimately in each individual respondent. An appropriate cluster solution, with clusters that are suitably large enough and appear meaningful in relation to the entire data set, is then determined. As discussed in Chapter 5, this is largely an interpretative process, with there being any number of appropriate solutions. For organisational justice perceptions a six-cluster solution is retained. For the two social justice variables both a three-cluster and six-cluster solution is explored. For both of these variables, however, a six-cluster solution is retained. Following this initial step, each cluster solution is discussed, looking at the composition of the clusters as well as the mean item score profiles. Through this process each cluster is defined in relation to the justice perceptions emerging for that group of people. While this analysis is important in itself in that it directly explores one of the research questions (about the ways in which people cluster together in relation to their justice perceptions) it can also be considered the first step in the next set of analyses, that of the CHAID analyses.

Using the clusters as dependent variables, the CHAID explores the relationship between the demographic variables and justice perceptions. A separate analysis is conducted for each of the justice dimensions, with two figures being presented for each. First a decision tree is presented, which displays the modeling results generated by the CHAID analysis. In this diagram the total database is divided into a first layer of "branches" based on the strongest predictor of the dependent variable, which is divided into a manageable number of categories. Additional branches are then generated using the strongest of the remaining predictors. It continues this branching procedure until the final branches or "twigs" of the tree have been generated. The second table to be presented is that of a competing splits tree, which indicates

which of the demographic variables are also strong predictors of justice perceptions, but were not as strong as the one selected by the CHAID.

Finally the chapter is concluded with a review of the main results found through the analyses conducted.

Scale Validation

The psychometric properties of the two measures of social and organisational justice used in the study were assessed, with particular attention to the reliability and validity of the measures. With regards to the organisational justice measure, the development and validation of this scale was discussed in Chapter 5. The psychometric properties of this scale, as they pertain to its use in the current study, are now reported.

As can be seen from Table 6.1 the Cronbach Alpha for the global justice perceptions scale for the main study was 0.95, indicative of high internal consistency, and in line with findings in the pilot study. The item-total statistics (Table 6.2) indicate that all the items are correlating sufficiently with the total score (the correlation co-efficients range between 0.37 and 0.75), and that the alpha would not be improved by deleting any of the items.

A Principle Component Factor Analysis was conducted in order to confirm the construct validity of the global justice perceptions scale. On the basis of Kaiser's criterion 3 factors with eigenvalues larger than 1 were initially extracted (See Table 6. 3). The cumulative proportion of variance explained by the three factors is 0.59. However the first factor accounts for 0.49 of that variance, with the other two factors only accounting for 0. 95 (0.05 and 0.04 respectively). The scree plot (See Table 6.4) indicates a possible three factor

solution. As such three factors were retained. When rotated using the varimax rotation method, all the items are still loading very strongly onto the first factor (See Table 6.5), although many of them are loading more strongly onto other factors. Given the extent to which the items are loading in across all the factors, it is clear that the factors are not emerging as distinct from one another. There are thus strong indications that a one-factor solution is appropriate. As such a principal component factor analysis retaining one-factor was conducted. The component matrix indicates that all the items are in fact loading onto the first factor (See Table 6.6), confirming a one-factor solution, and supporting the construct validity of the measuring instrument.

From the above discussion it can be seen that the global organisational justice scale has suitable reliability and validity for use in this study. In addition to this, these results are similar to those found in the pilot study (as described in Chapter 5). The fact that the findings replicate themselves across samples further confirms both the validity and reliability of the measure, confirming its suitability for use in this study.

With regards to the belief in a just world scale, a Cronbach Alpha of 0.42 was found for the current study (See Table 6.7). This indicates very poor internal consistency, and raises concerns about the reliability of the measuring instrument. The item-total statistics (See Table 6.8) verify that none of the items were correlating sufficiently from the total, with item 8 and 16 correlating negatively with the total. None of the items would improve the alpha significantly if deleted. As such further exploration of the instrument was required, in order to determine whether a reliable sub-scale could be salvaged.

Table 6.1: Cronbach Alpha for Global Organisational Justice Perceptions Scale

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.95
Standardized	0.95

Table 6.2: Item-Total Statistics for Global Organisational Justice Perceptions Scale

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		Standardized Variables		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
OJ1	0.64	0.95	0.64	0.95	OJ1
OJ2	0.73	0.95	0.73	0.95	OJ2
OJ3	0.64	0.95	0.64	0.95	OJ3
OJ4	0.65	0.95	0.65	0.95	OJ4
OJ5	0.60	0.95	0.60	0.95	OJ5
OJ6	0.68	0.95	0.68	0.95	OJ6
OJ7	0.76	0.95	0.76	0.95	OJ7
OJ8	0.70	0.95	0.79	0.95	OJ8
OJ9	0.53	0.95	0.53	0.95	OJ9
OJ10	0.66	0.95	0.66	0.95	OJ10
OJ11	0.64	0.95	0.64	0.95	OJ11
OJ12	0.65	0.95	0.65	0.95	OJ12
OJ13	0.65	0.95	0.65	0.95	OJ13
OJ14	0.69	0.95	0.69	0.95	OJ14
OJ15	0.72	0.95	0.72	0.95	OJ15
OJ16	0.67	0.95	0.67	0.95	OJ16
OJ17	0.77	0.95	0.77	0.95	OJ17
OJ18	0.38	0.95	0.38	0.95	OJ18
OJ19	0.71	0.95	0.71	0.95	OJ19
OJ20	0.64	0.95	0.64	0.95	0J20
OJ21	0.74	0.95	0.74	0.95	OJ21
OJ22	0.40	0.95	0.40	0.95	OJ22
OJ23	0.72	0.95	0.72	0.95	OJ23
OJ24	0.66	0.95	0.66	0.95	OJ24

Table 6.3: Factor Extraction with Kaiser's Criterion for Global Organisational Justice Perceptions Scale

Eigenvalues of the Correlation Matrix: Total = 24 Average = 1				
	Eigenvalue	Difference	Proportion	Cumulative
1	11.97	10.75	0.50	0.50
2	1.231	0.17	0.05	0.55
3	1.06	0.20	0.04	0.60
4	0.86	0.02	0.04	0.63
5	0.84	0.08	0.04	0.66
6	0.76	0.08	0.03	0.70
7	0.68	0.06	0.03	0.72
8	0.63	0.03	0.03	0.75
9	0.60	0.03	0.03	0.78
10	0.57	0.05	0.02	0.80
11	0.52	0.04	0.02	0.82
12	0.48	0.04	0.02	0.84
13	0.45	0.02	0.02	0.86
14	0.43	0.06	0.02	0.88
15	0.37	0.00	0.02	0.89
16	0.37	0.04	0.02	0.91
17	0.33	0.00	0.01	0.92
18	0.33	0.02	0.01	0.94
19	0.30	0.01	0.01	0.95
20	0.30	0.03	0.01	0.96
21	0.27	0.04	0.01	0.97
22	0.23	0.01	0.00	0.98
23	0.22	0.04	0.00	0.99
24	0.19		0.00	1.00

Variance Explained by Each Factor		
Factor1	Factor2	Factor3
11.97	1.23	1.06

Table 6.4 Scree Plot for Global Organisational Justice Perceptions Scale

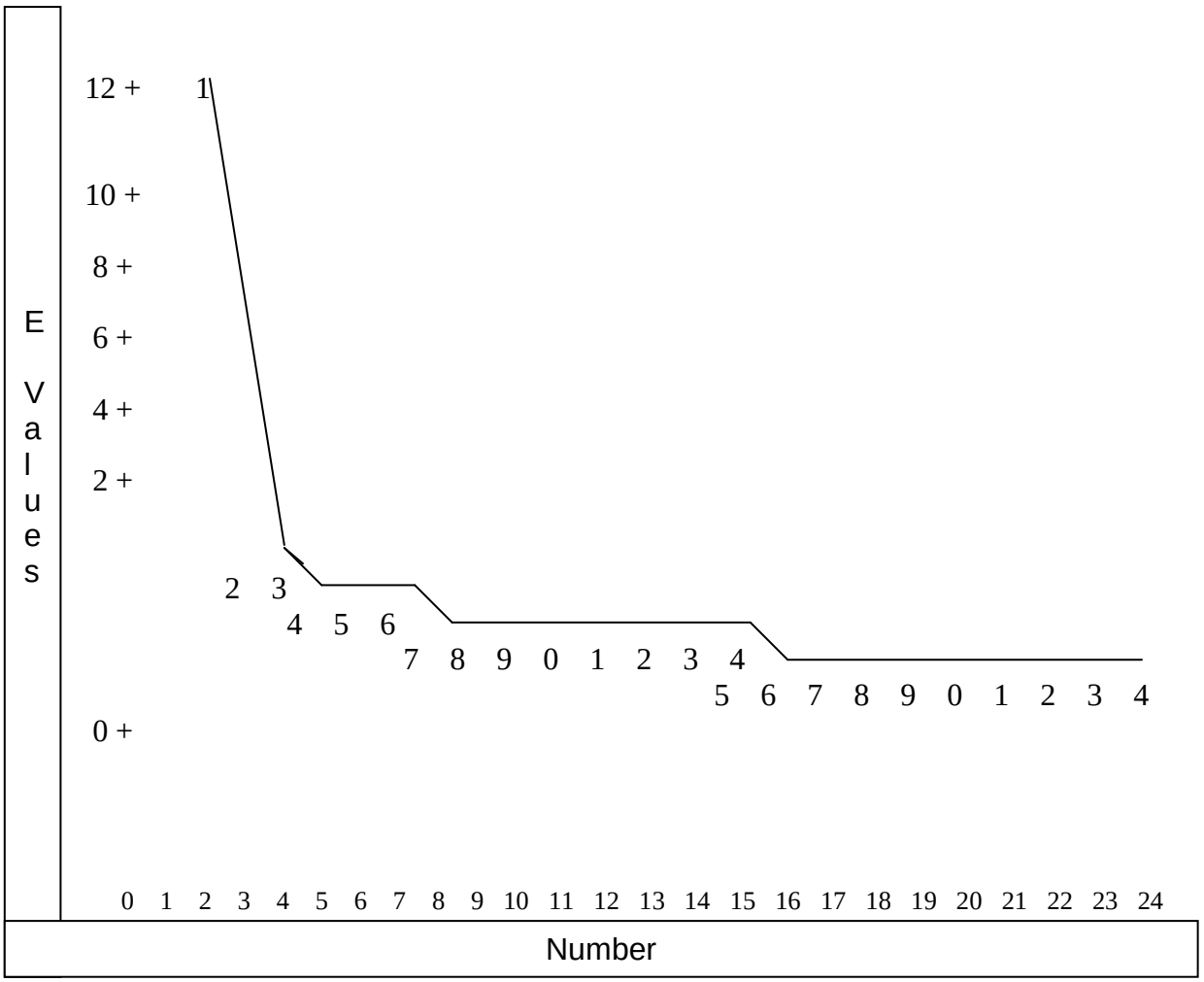


Table 6.5: Component Matrix for Global Organisational Justice Perceptions Scale – Varimax Rotation

Rotated Factor Pattern			
	Factor1	Factor2	Factor3
OJ1	0.72	0.27	0.06
OJ2	0.73	0.36	0.11
OJ3	0.39	0.6	0.15
OJ4	0.75	0.23	0.11
OJ5	0.45	0.49	0.13
OJ6	0.6	0.37	0.24
OJ7	0.69	0.39	0.2
OJ8	0.49	0.49	0.36
OJ9	0.36	0.35	0.26
OJ10	0.34	0.73	0.03
OJ11	0.57	0.4	0.11
OJ12	0.74	0.2	0.13
OJ13	0.56	0.33	0.23
OJ14	0.55	0.37	0.36
OJ15	0.64	0.43	0.11
OJ16	0.35	0.75	0.02
OJ17	0.58	0.55	0.13
OJ18	-0.08	0.47	0.64
OJ19	0.56	0.36	0.39
0J20	0.31	0.58	0.33
OJ21	0.46	0.63	0.22
OJ22	0.24	-0.04	0.81
OJ23	0.3	0.72	0.32
OJ24	0.56	0.28	0.45

Variance Explained by Each Factor		
Factor1	Factor2	Factor3
6.75	5.22	2.28

Table 6.6: Component Matrix for Global Organisational Justice Perceptions Scale – One Factor Analysis

Factor Pattern	
	Factor1
OJ1	0.70
OJ2	0.78
OJ3	0.70
OJ4	0.72
OJ5	0.67
OJ6	0.73
OJ7	0.80
OJ8	0.77
OJ9	0.56
OJ10	0.71
OJ11	0.69
OJ12	0.70
OJ13	0.68
OJ14	0.74
OJ15	0.76
OJ16	0.72
OJ17	0.80
OJ18	0.44
OJ19	0.75
0J20	0.69
OJ21	0.79
OJ22	0.41
OJ23	0.77
OJ24	0.72

Table 6.7: Cronbach Alpha for Belief in a Just World Scale

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.43
Standardized	0.42

Table 6.8: Item-Total Statistics for Belief in a Just World Scale

Cronbach Coefficient Alpha with Deleted Variable				
	Raw Variables		Standardized Variables	
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha
JW1	0.03	0.44	0.03	0.42
JW2	0.12	0.42	0.12	0.40
JW3	0.20	0.40	0.19	0.39
JW4	0.20	0.40	0.20	0.38
JW5	0.11	0.42	0.11	0.41
JW6	0.21	0.40	0.20	0.38
JW7	0.27	0.38	0.26	0.37
JW8	-0.12	0.46	-0.12	0.45
JW9	0.21	0.40	0.20	0.38
JW10	0.13	0.41	0.13	0.40
JW11	0.29	0.38	0.28	0.37
JW12	0.16	0.41	0.16	0.39
JW13	0.01	0.44	0.01	0.43
JW14	0.10	0.42	0.09	0.41
JW15	0.29	0.38	0.28	0.37
JW16	-0.08	0.46	-0.07	0.44
JW17	0.06	0.43	0.06	0.42
JW18	0.09	0.42	0.09	0.41
JW19	0.10	0.42	0.09	0.41
JW20	0.06	0.43	0.06	0.42

A principal components factor analysis was conducted in order to explore the structure of the scale. As Table 6.9 reveals, on the basis of Kaiser's criterion 7 factors with eigenvalues larger than one were retained. The total variance explained by this solution was 57.04% , with the first factor only accounted for 17.81% of the variance. The second factor accounted for 9.27% of the variance, the third 7.11%, the fourth 6.76%, and the fifth, sixth, and seventh each accounting for approximately 5%. The scree-plot (See Table 6.10) indicates a possible two or three factor solution. Given that the scale was initially structured along the lines of two dimensions (that of a just and unjust belief) (Rubin & Peplau, 1973), and that previous studies have indicated a clear two-factor solution (Couch, 1998), it was decided to retain two factors.

The unrotated factor matrix for a two-factor solution (See Table 6.11) indicates that 'just' and 'unjust' items are loading positively in relation to the two different factors. There are two exceptions, namely item 7 and item 8. Item 7 is loading in almost equally across the two factors, and item 8 is not loading in on either of the factors. The rotated solution (See Table 6.12) replicates this pattern, only the loadings are clearer and more definitive. Item 7 now loads more clearly onto Factor 1, and no longer loads onto Factor 2. Item 8 now makes the 0.15 cut-off suggested by Cattell (1978) and now positively, albeit weakly, loads onto Factor 2.

It is clear that two factors related to 'just' and 'unjust' items are emerging. Conceptually this seems appropriate. In the original scale, Rubin and Peplau (1973) included just and unjust items, instructing that the unjust items be negatively scored in order to obtain a total belief in a just world score. However it could be argued that belief in a just world and belief in an unjust world are conceptually different constructs, rather than being at opposite ends

on a continuum. Not believing in a just world, i.e. that each will get his/her due, does not necessarily mean that a person believes in an unjust world, i.e. that bad things will happen to good people. As such, revere scoring unjust items in order to get a total score may be misleading – it is treating two separate constructs as if they were opposite ends of a continuum. Such an understanding can account for the low internal consistency of the scale, as the just and unjust beliefs may not be correlating with one another. It is possible that the two factors emerging from the factor analysis are indicating two separate scales measuring independent constructs. As such these two factors were explored further in relation to internal consistency.

The Cronbach Alpha for belief in an unjust world scale (See Table 6.13) is 0.64, indicating a satisfactory level of internal consistency. The item-total statistics for this scale (See Table 6.14) show that while all the items are correlating with the total, they are doing so rather moderately. However the alpha would not be improved by the deletion of any of the items. The Cronbach Alpha for the new belief in just world scale (See Table 6.15) is 0.71, also indicating a satisfactory level of internal consistency. The item-total statistics for this scale (See Table 6.16) show that all the items are correlating with the total, some more moderately than others- the item-total correlations range from 0.22 to 0.44. However the alpha would not be improved by the deletion of any of the items.

Further analysis was conducted in order to establish the extent to which these two factors are related to one another. Due to the fact that the distribution for these two scales is not normal (See Tables 6.20 and Table 6.21), a Spearmans correlation co-efficient was obtained (See Table 6. 17). A weak significant negative relationship of -0.252 exists between the two factors.

Table 6.9: Factor Extraction with Kaiser's Criterion for Belief in a Just World Scale

Eigenvalues of the Correlation Matrix: Total = 20 Average = 1				
	Eigenvalue	Difference	Proportion	Cumulative
1	3.56	1.71	0.18	0.18
2	1.85	0.43	0.09	0.27
3	1.42	0.07	0.07	0.34
4	1.35	0.20	0.07	0.41
5	1.15	0.12	0.06	0.47
6	1.04	0.01	0.05	0.52
7	1.03	0.05	0.05	0.57
8	0.98	0.08	0.05	0.62
9	0.90	0.08	0.05	0.66
10	0.81	0.05	0.04	0.70
11	0.77	0.07	0.04	0.74
12	0.70	0.04	0.04	0.78
13	0.66	0.01	0.03	0.81
14	0.65	0.02	0.03	0.84
15	0.63	0.07	0.03	0.88
16	0.56	0.04	0.03	0.90
17	0.52	0.03	0.03	0.93
18	0.49	0.02	0.02	0.95
19	0.47	0.03	0.02	0.98
20	0.44		0.02	1.00

Table 6.10: Scree Plot for Belief in a Just World Scale

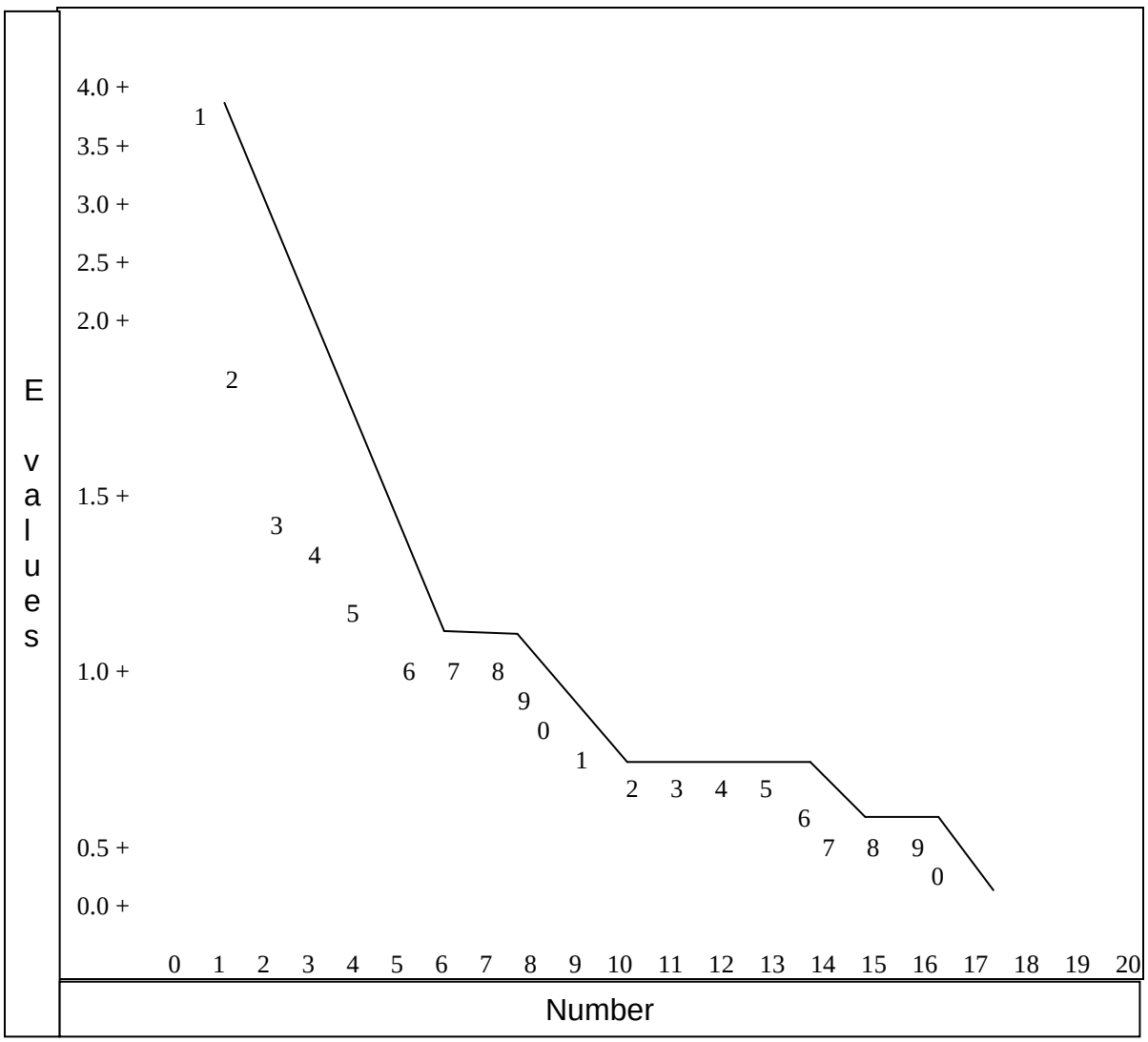


Table 6.11: Component Matrix for Belief in a just World Scale – Two-Factor Analysis (Unrotated)

		Factor Pattern	
		Factor1	Factor2
JW1	(U)	-0.258	0.31*
JW2	(J)	0.28*	0.13
JW3	(J)	0.43*	0.12
JW4	(U)	-0.18	0.63*
JW5	(U)	-0.33	0.54*
JW6	(J)	0.51*	0.22
JW7	(J)	0.46*	0.40
JW8	(U)	-0.42	-0.04
JW9	(J)	0.44*	0.24
JW10	(U)	-0.31	0.45*
JW11	(J)	0.52*	0.20
JW12	(J)	0.51*	0.05
JW13	(U)	-0.41	0.33*
JW14	(J)	0.48*	-0.06
JW15	(J)	0.58*	0.40
JW16	(U)	-0.55	0.12*
JW17	(U)	-0.40	0.36*
JW18	(J)	0.42*	0.10
JW19	(J)	0.43*	0.12
JW20	(U)	-0.28	0.28*

*Indicates highest positive loading

Variance Explained by Each Factor	
Factor1	Factor2
3.56	1.85

Table 6.12: Component Matrix for Belief in a Just World Scale – Two-Factor Analysis (Varimax Rotation)

Rotated Factor Pattern			
		Factor1	Factor2
JW1	(U)	-0.07	0.34*
JW2	(J)	0.30*	-0.02
JW3	(J)	0.43*	-0.11
JW4	(U)	0.16	0.63*
JW5	(U)	-0.02	0.64*
JW6	(J)	0.55*	-0.06
JW7	(J)	0.60*	0.12
JW8	(U)	-0.38	0.18*
JW9	(J)	0.50*	-0.02
JW10	(U)	-0.04	0.54*
JW11	(J)	0.55*	-0.08
JW12	(J)	0.46*	-0.21
JW13	(U)	-0.19	0.50*
JW14	(J)	0.38*	-0.29
JW15	(J)	0.70*	0.06
JW16	(U)	-0.42	0.38*
JW17	(U)	-0.16	0.51*
JW18	(J)	0.42*	-0.12
JW19	(J)	0.43*	-0.11
JW20	(U)	-0.10	0.38*

*Indicates highest positive loading

Variance Explained by Each Factor	
Factor1	Factor2
3.14	2.28

Table 6.13: Cronbach Alpha for Belief in an Unjust World Scale

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.64
Standardized	0.64

Table 6.14: Item-Total Statistics for Belief in an Unjust World Scale

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		Standardized Variables		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
JW1	0.23	0.63	0.23	0.63	JW1
JW4	0.31	0.62	0.31	0.62	JW4
JW5	0.39	0.60	0.38	0.60	JW5
JW8	0.24	0.63	0.25	0.63	JW8
JW10	0.33	0.61	0.33	0.61	JW10
JW13	0.34	0.61	0.34	0.61	JW13
JW16	0.37	0.60	0.38	0.60	JW16
JW17	0.37	0.60	0.37	0.60	JW17
JW20	0.29	0.62	0.29	0.62	JW20

Table 6.15: Cronbach Alpha for New Belief in a Just World Scale

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.71
Standardized	0.71

Table 6.16: Item-Total Statistics for New Belief in a Just World Scale

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		Standardized Variables		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
JW2	0.22	0.72	0.22	0.71	JW2
JW3	0.38	0.69	0.38	0.69	JW3
JW6	0.39	0.69	0.39	0.69	JW6
JW7	0.41	0.69	0.41	0.69	JW7
JW9	0.37	0.69	0.37	0.69	JW9
JW11	0.45	0.68	0.45	0.68	JW11
JW12	0.38	0.69	0.38	0.69	JW12
JW14	0.32	0.70	0.32	0.70	JW14
JW15	0.46	0.68	0.46	0.68	JW15
JW18	0.26	0.71	0.26	0.71	JW18
JW19	0.31	0.70	0.31	0.70	JW19

Table 6.17: Spearman's Correlation Co-efficients for the New Belief in a Just World Scale and the Belief in an Unjust World Scale

	UJWTot	JWTot
UJWTot	1.00	-0.25
		<.00
	453	448
JWTot	-0.25	1.00
	<.00	
	448	453

It is unsurprising that the two constructs are somewhat negatively related, yet the weak relationship between the two indicates that there is not a multi-collinearity problem, and that the two constructs are in fact measuring different things. The relationship between these two variables is discussed in more detail in Chapter 7 (under the heading Relationship between Variables)

Given the satisfactory reliability as well as validity of the two scales, it was decided to proceed using these two measures independently of one another.

Description of the Data Set

A number of statistics were run in order to explore and describe the data set. Firstly basic descriptive statistics for each of the dependent variables were obtained. As indicated in Table 6.18 the maximum score for the global organisational justice perceptions scale is 118.96, and the minimum score is 24.00. The mean score for this scale is 68.86, representative of moderate to slightly low mean organisational justice perceptions. The standard deviation is 19.95. With regards to the belief in an unjust world scale, the maximum score is 45.00, the minimum score is 9.00, and the mean score is 23.32. This is indicative of a moderate to slightly low mean belief in an unjust world. The standard deviation is 5.11. The maximum score for the belief in a just world scale is 55.00, while the minimum score is 11. The mean score is a moderate to high 36.67. The standard deviation is 6.33.

Analyses were then conducted in order to explore the nature of the distribution for each of the dependent variables. All three tests of normality for the global organisational justice

Perceptions distribution (See Table 6.19) have p- values above the 0.05 significance level (p>0.150, p>0.250, p>0.250), indicating that the distribution is normal. The histogram (See Figure 6.1) clearly fits a normal distribution. All three tests of normality for the belief in an unjust world scale distribution (See Table 6.20) have p- values below the 0.05 significance level (p>0.010, p>0.005, p>0.005), indicating that the distribution is not normal. The histogram (See Figure 6. 2) indicates that the distribution is slightly skewed to the left. All three tests of normality for the new belief in a just world distribution (See Table 6.21) have p- values below the 0.05 significance level (p>0.010, p>0.008, p>0.005), indicating that the distribution is not normal. The histogram (See Figure 6.3) indicates that the distribution is slightly skewed to the right.

Only one of the distributions, that of organisational justice perceptions meets the assumption of normality required for the use of parametric statistics. As such, where required, non-parametric equivalent statistical procedures were used.

Relationships between the Dependent Variables

The first research question relates to the nature of the relationship between different 'types' of justice, particularly that of social and organisational justice. As such correlation analyses were used in order to explore the relationship between perceptions of organisational justice, belief in a just world, and belief in an unjust world. As can be seen from Table 6.22 global organisational justice perceptions are not significantly correlated with belief in an unjust world, but are very weakly correlated with belief in a just world (0.107, p>0.02). Belief in an unjust world and belief in a just world are negatively correlated (-0.252, p>0001), but once again this correlation is very weak. This indicates that the organisational and

Table 6.18: Summary Statistics for All Scales

Variable	Maximum	Mean	Minimum	N	N Miss	Std Dev
Organisational Justice	118.96	68.86	24.00	464	3	19.95
Belief in an Unjust World	45.00	23.32	9.00	453	14	5.12
Belief in a Just World	55.00	36.67	11.00	453	14	6.33

Table 6.19: Distribution Analysis for Global Organisational Justice Perceptions Scale – Goodness of Fit Tests for Normal Distribution

Test		Statistic		p Value
Kolmogorov-Smirnov	D	0.03	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.04	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.45	Pr > A-Sq	>0.250

Figure 6.1: Distribution Analysis for Global Organisational Justice Perceptions Scale – Histogram with Fitted Normal Distribution

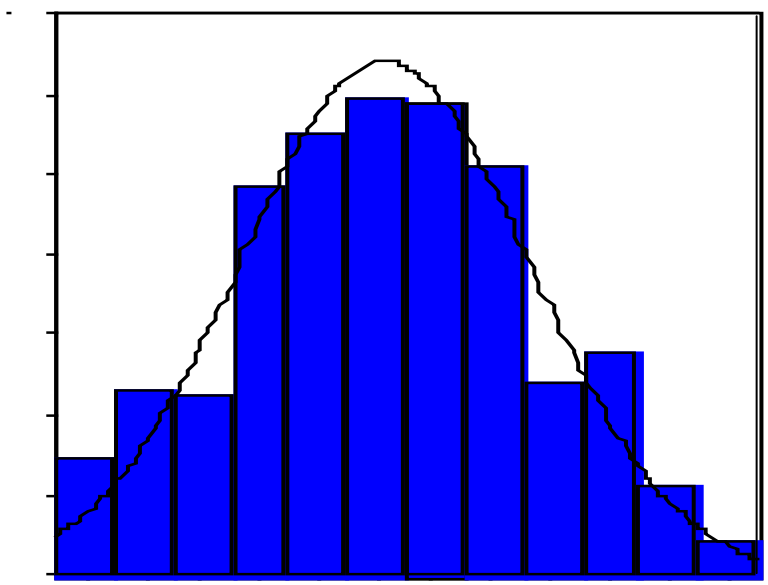


Table 6.20: Distribution Analysis for New Belief in an Unjust World – Goodness of Fit Tests for Normal Distribution

Test		Statistic	p Value	
Kolmogorov-Smirnov	D	0.08	Pr > D	<0.010
Cramer-von Mises	W-Sq	0.33	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	1.90	Pr > A-Sq	<0.005

Figure 6.2: Distribution Analysis for New Belief in an Unjust World – Histogram with Fitted Normal Distribution

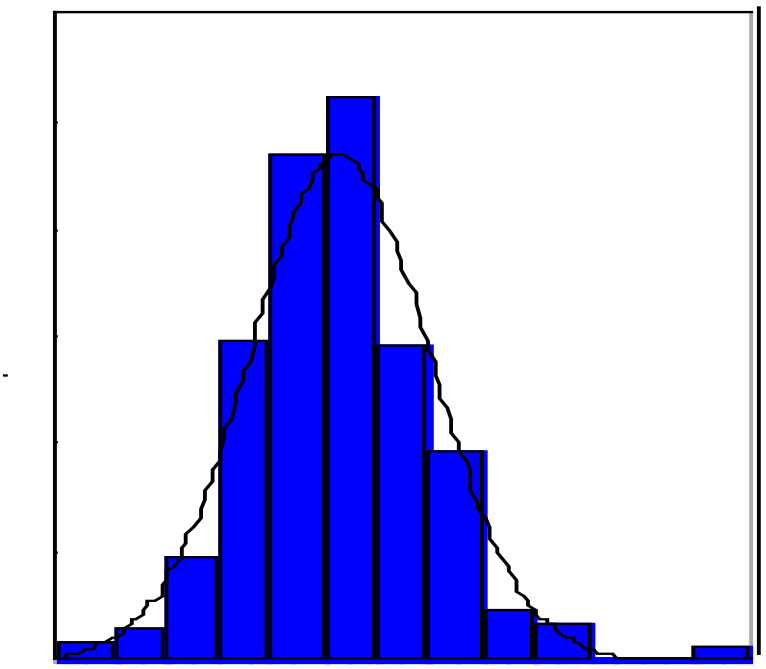


Table 6.21: Distribution Analysis for New Belief in a Just World – Goodness of Fit Tests for Normal Distribution

Goodness-of-Fit Tests for Normal Distribution				
Test		Statistic	p Value	
Kolmogorov-Smirnov	D	0.05	Pr > D	<0.010
Cramer-von Mises	W-Sq	0.19	Pr > W-Sq	0.008
Anderson-Darling	A-Sq	1.25	Pr > A-Sq	<0.005

Figure 6.3: Distribution Analysis for New Belief in a Just World – Histogram with Fitted Normal Distribution

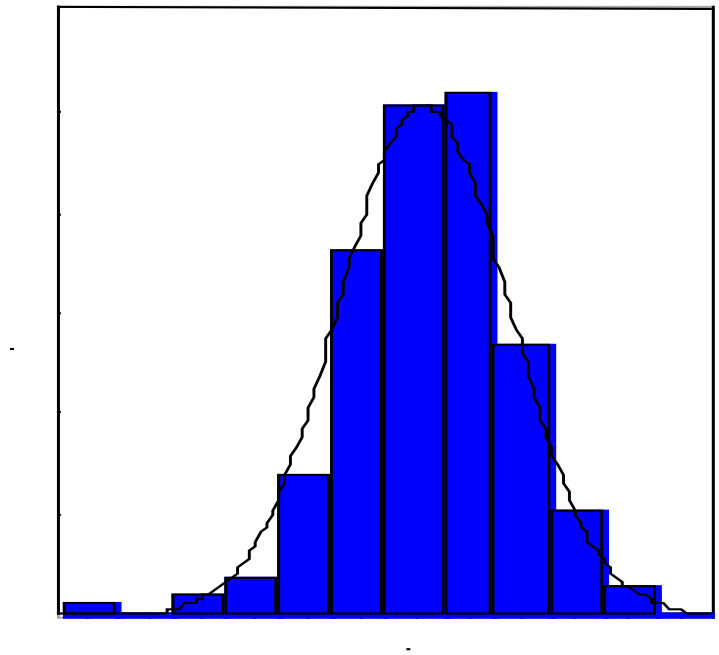


Table 6.22: Spearman Correlation Co-Efficients for All Scales

	UJWTot	JWTot	OJTot
UJWTot	1.00	-0.25	-0.01
		<.00	0.85
	453	448	453
JWTot	-0.25	1.00	0.11
	<.00		0.02
	448	453	453
OJTot	-0.01	0.11	1.00
	0.85	0.02	
	453	453	464

social justice perceptions should be seen as independent of one another.

Cluster Analysis

The second research question relates to the way in which people cluster together in relation to their perceptions of justice. In order to answer this question a cluster analysis was conducted on each of the dependent variables. This analysis also provides the first step of the CHAID analysis, which was conducted next. Each of the cluster analyses are now reported on, starting with organisational justice perceptions, then belief in a just world, and finally belief in an unjust world. For each analysis, first a cluster history report is presented along with a dendrogram, both of which form the basis for deciding how many clusters should be retained. On the basis of this decision a cluster composition table is then presented, indicating how each cluster is composed. Finally, a graph indicating the mean score for each item per cluster is presented.

With regards to organisational justice perceptions, as can be seen from the Cluster History Table (See Table 6.23) and the Dendrogram (See Figure 6.4), the first cluster, comprising 451 people splits at a height of 0.296 into Clusters 3 and 2. Cluster 3, comprising 169 people splits into Clusters 8 and 13 at a height of 0.037. Cluster 8, comprising 108 people, then splits into Clusters 22 (n=63) and 25 (n=45) at a height of 0.008. On the other hand, Cluster 13 (n=61) splits into Clusters 18 and 438 much lower down at 0.006. Cluster 2 (n=282), on the other hand, splits into Clusters 5 and 4 at a height of 0.093. Cluster 5, comprising 166 people, splits into Clusters 6 and 11 at a height of 0.016. Cluster 6 (n-125) in turn splits into Clusters 7 and 19 at 0.0108, Cluster 7 (n=100) into Clusters 17 (n=53) and 12 (n=47) at 0.010, and Cluster 19 (n=25) splits into Clusters 28 and 54 much lower down at 0.005.

Cluster 11, comprising 41 people, also splits lower down, at 0.07. Cluster 4 (n=116) splits into Clusters 9 and 10 at 0.023. Cluster 9 (n=62) then splits into Clusters 20 and 16 at 0.083, while Cluster 10 (n=54) splits into Clusters 14 and 68 at 0.0077.

Working on the basis of a six cluster solution, it can be seen from Table 6.24 that Cluster 1 has 54 members, Cluster 2 has 108, Cluster 3 has 61, Cluster 4 has 62, Cluster 5 has 41, and Cluster 6 has 125 members. Looking at the mean score for each item in each cluster, it can be observed that in Cluster 1 the mean scores range from 1.13 to 2.24, with the majority of items having a mean score between 1.12 to 1.81. For items 6,7,13,14,15, and 19, no-one in the cluster scored higher than 3, while for items 2,8,11,12,17,20,21, and 23, the maximum score is 4. As such it is only for items 1,3,4,5,9,10,16,18,22, and 24 that the maximum of 5 has been scored. For Cluster 2 the mean scores for the items are generally higher, all falling above 3. The maximum score for all the items is 5, except item for 20 where the maximum score is 4. For items 4,8,13,14,15,17,20, and 22, no-one scored lower than 2. The mean scores in Cluster 3 are the highest out of all the clusters, with the scores ranging between 3.88 and 4.57. The maximum scores for all the items are 5, while only items 4,5,7,11,14,15,16,17, and 18 have a minimum score of 1. All the other items have minimum scores ranging between 2 and 3. Cluster 4 has a greater mixture of mean scores, with an almost equal combination of scores around 1 and 2. The minimum score of all the items is 1, while there is a range of maximum scores, mainly 4 and 5. Cluster 5 also has a greater mixture of mean scores than Clusters 1,2, and 3, but for this cluster the combination is of scores around 2 and 3. The minimum scores are predominantly 1, except for items 1,2,3,4,6, and 12 where the minimum score is 2. The maximum scores vary between 4 and 5. The mean scores in Cluster 6 range between 2.13 and 2.90, with only items 9,13,14, and 22 having mean scores around 2. Item 11 has a mean score of 1.94. The minimum score for all

the items is 1, and the maximum scores are predominantly 5, except for items 15, and 23 that have maximum scores of 4.

Looking at the mean score profiles for the clusters (See Figure 6.5), from the starting point of item 1, all the clusters move down to item 2. The magnitude of this drop is higher for Clusters 1,4, and 6, while it is marginal for Clusters 2,5, and 3. Clusters 1,4,6, and 3 move up for item 3, while Cluster 2 moves down quite sharply for this item. Cluster 5 also drops, but more moderately. For item 4, Clusters 1, 3 and 5 slope down slightly, while all the other clusters move up, Clusters 4 and 2 relatively sharply. Clusters 4,2,5, and 3 all drop for item 5 (Clusters 5 and 4 rather sharply), while Clusters 1 and 6 move up for that item. Clusters 1 and 4 have virtually the same mean score for this item. All the clusters except for Cluster 1 move up to a peak for item 6, with Clusters 4 and 5 doing so more sharply than the others. Cluster 1 drops for this item. All the clusters move down for item 7, Clusters 2 and 4 relatively sharply. Clusters 6 and 5 have the same mean score for this item. Clusters 1,4,6, and 5 move slightly up for item 8, while Cluster 4 remains almost level and Cluster 3 drops slightly. Again Clusters 6 and 5 have the same mean score for this item. All the clusters move up for item 9, with Clusters 1,4, and 5 doing so quite sharply, and Cluster 8 doing so very slightly. Clusters 4 and 6 have the same item mean score for this item. The item means in all the clusters drop for item 10, most sharply in Clusters 1 and 4. Clusters 6 and 5 have the same item mean score for this item. The item mean score for all the clusters drop considerably sharply for item 11, except in Cluster 1where the mean score has remained the same as item 10. Cluster 1 and 4 share the same mean score for this item. Once again the clusters all follow a similar pattern in relation to the mean score for item 12. All the clusters move up, and Clusters 5 and 2 share the same mean score for this item. Between items 13 and 17 the clusters diverge in terms of their patterns. Cluster 1 remains fairly consistent

peaking slightly at item 16, and then dropping back down for item 17. Cluster 4 drops steadily down across these items, having the lowest score for item 16. This cluster overlaps with Cluster 1 with regards to the mean score for item 16. Cluster 6 drops sharply for items 14 and 15, but increases slightly for item 15 and more so for item 16. Cluster 5 remains level across these items, overlapping with Cluster 6 on item 14. Cluster 2 drops slightly down to item 16, but increases again for item 17. This pattern is echoed in Cluster 3, only the magnitude of the variance in Cluster 3 being much smaller. For item 18, two sets of clusters overlap. Cluster 1 increases sharply and Cluster 5 drops rather sharply, resulting in a shared mean score for this item for these two clusters. Similarly Cluster 6 increases and Cluster 2 decreases for this item, also resulting in a common mean score. The mean score for item 18 increases sharply in Cluster 4, following a similar pattern to Clusters 1 and 6. Cluster 3, on the other hand, drops slightly for this item. For item 19, the mean score drops rather sharply in Clusters 1 and 4, and more moderately in Cluster 6. Moving in the opposite direction, the mean score for Cluster 5 moves up, and is almost identical to the mean item score in Cluster 6. The item mean score also increases slightly in the last two clusters, 3 and 2. The item mean score for item 20 increases in Clusters 1,4,6 and 5, but remains similar to item 19 for Clusters 2 and 3. Similarly for item 21 the item mean score drops increases in Clusters 1,4,6 and 5, but remains similar to item 20 for Clusters 2 and 3. There is a relatively sharp increase in the item mean score for item 22 across all the clusters, particularly so in Cluster 2. Clusters 6,4, and 2 share a common mean score for this item. All the clusters drop back down for item 23, where once again Clusters 6,4, and 2 share a common mean score for this item. Finally all the clusters except Cluster 5 increase marginally for item 24. Cluster 5 continues to drop.

As such, when looking at the organisational justice perceptions clusters, it can be seen that generally, the clusters lie relatively parallel to one another. At a most basic interpretation, the clusters move from those with low justice perceptions to those with high justice perceptions. Cluster 3 comprises those with the highest justice perceptions, and Cluster 1 those with predominantly the lowest. Clusters 5 and 6 appear to represent those with generally moderate perceptions of justice, with there being some significant overlap between those two clusters. People in Cluster 2 seem to have fairly high perceptions of organisational justice, with those in Cluster 4 having fairly low to moderate perceptions. While the cluster profiles do seem to follow similar patterns, varying most obviously in relation to mean scores for each item, there are areas of divergence and similarity that help to define the clusters more meaningfully.

Starting with Cluster 3, it can be seen that the people in this cluster have the highest organisational justice perceptions, with there being no areas of overlap between this cluster and any of the other clusters. This cluster has the highest mean scores across all the items, with most of the item mean scores falling between 4 and 4.5. This cluster also has the smallest range of scores, with all mean scores falling between 3.89 and 4.57. The people in this cluster appear to have fairly consistent perceptions across all the items, with there being no significant peaks or valleys. This, along with the high scores is an indication that perhaps people in this cluster have a generalised positive attitude to the organisation, not really differentiating between different issues or areas of organisational functioning. Instead they almost indiscriminately perceive everything to be just and fair. This cluster can, therefore, be defined as comprising “generalised high justice perception scorers”.

Cluster 2 can be defined as the next cluster down – despite having the same starting point as Cluster 5, the mean scores for all other items are higher (except for item 12 where they are virtually identical). The mean item scores for this cluster fall between 3 and 4, with the lowest mean (2.97) being for item 11- "Employees are paid a fair salary". Generally, however, there are moderately high perceptions for all the items. Like those in Cluster 3, the people in this cluster also appear to be fairly consistent in their perceptions across items, with there being no particularly significant peaks or valleys. Cluster 2 is very similar in profile to Cluster 3, with the main differences being that the mean item scores are slightly lower, and the peaks and valleys (despite being very moderate) are slightly sharper. This perhaps indicates that people in this cluster, while having generally positive perceptions of justice in the organisation, are slightly more critical than those people in Cluster 3.

This is particularly true with regards to the extent to which information is shared with all employees (item 3), issues about salary (item 11), the fairness of treatment that all employees receive (item 16), and the extent to which everyone does their fair share of work (item 18). While these perceptions are still moderate to high, they do deviate slightly from a generally higher perception of fairness. These items seem to indicate a concern for the general employee body in relation to general areas of organisational functioning– i.e. they ask about the general treatment all employees receive with regards to broader areas of practice (for example work allocation, information sharing) rather than more specific domains such as disciplinary enquiries and job selection. Most of the highest mean item scores refer to such specific domains. For example three of the highest scoring items, item 22 (vacant posts are advertised to as many people as possible will hear of the vacancy), item 9 (management gives representative unions their due respect), and item 4 (Employees will have a fair hearing when problems arise), refer to very particular organisational practices.

This may indicate that while people in this cluster may be satisfied with the treatment that they are receiving, particularly in relation to specific organisational policies and procedures, the source of some of their criticisms may be in relation to the general treatment the entire employee body is receiving.

These concerns become more evident when looking at the points at which Cluster 2 deviates from Cluster 3. The first divergence occurs with items 1 to 3, where the mean item scores in Cluster 2 drop relatively sharply, but remains consistently high in Cluster 3. These items refer to the fairness of disciplinary hearings, the extent to which managers are fair in their dealings with employees, and the extent to which relevant information is shared with all employees. Further along, Cluster 2 once again diverges from Cluster 3 at item 10, where the mean item score for Cluster 2 once again drops in contrast to a consistently high score in Cluster 3. This item refers to the extent to which employees input is important when decisions are made. As such while Cluster 2, like Cluster 3, has relatively high justice perceptions, Cluster 2 differs from Cluster 3 in that there seems to be more reservation about the relationship between management and employees. This appears to be more particularly in relation to the inclusiveness of this relationship. As such Cluster 2 can be defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly.

Cluster 5 is the next cluster down. While this cluster starts off at the same place as Cluster 2 (i.e. it has the same mean item score for item 1 – "The disciplinary procedures used are fair"), this item marks a high point for Cluster 5 and a low point for Cluster 2. Cluster 5 has a fairly wide range of scores overall, with the mean item score falling between 2.10 and 3.78. This is a range of almost two numbers, indicating perceptions that range between

moderately low to moderately high. This cluster is also less consistent than the previous two, in that there are far more peaks and valleys, with significantly more variance between the mean item scores across all the items. As such people in this cluster seem to be less consistent with regards to their perceptions of justice in relation to different areas of organisational functioning.

The high points for Cluster 5 include items 1 and 4 (the extent to which disciplinary procedures are fair), 6 (the extent to which people have a fair chance of accessing training), 9 (the extent to which management gives unions their due respect and consideration) and 12 (the extent to which punitive action taken against employees is fair). All of these mean item scores fall between 3.50 and 3.78, indicating above average justice perceptions in these areas. For the most part these items seem to refer to collective industrial relations issues, in that they focus on aspects of the governance of employee-employer relations. This seems to be particularly true around questions of discipline. As such while people in this cluster have perceptions that are more moderate than the other two clusters already discussed, their concerns do not seem to be about relations between employees and management. Instead there are clearly other areas that mark particular concerns for this cluster, as there are a number of items where justice perceptions fall well below the average mark. These include items 5 (the extent to which employees are rewarded for their efforts), 7 (the extent to which selection procedures used to fill vacancies are fair), 11 (the extent to which employees are paid a fair salary), 18 (the extent to which everyone does their fair share of work), 21 (the extent to which decisions made are in the best interests of all employees), and 24 (the belief that the best person for the job usually gets the job). All of these items fall between 2.10 and 2.40, indicating moderately low perceptions of justice in these areas. These items seem to focus on the material benefits and rewards individuals have access to within the

organisation, such as salary, workload, and promotion and job opportunities. As such people in Cluster 5 may be characterised as being relatively satisfied with collective industrial relationship issues, but less so with the individual material benefits.

Moving onto Cluster 6, it can be seen that scores in this cluster share a similar mark range as Cluster 5, falling between 1.94 and 3.62. While this indicates a marginally 'lower' profile (i.e. the bottom and high scores in Cluster 6 are both lower than in Cluster 5), for many items there are also very similar mean scores. The mean scores for items 7 (Selection procedures used to fill vacancies are fair) ,8 ("Work is allocated fairly") ,10 ("Employees input is important when decisions are made") , 13 (" Everyone has the opportunity to develop themselves professionally") , 14 ("You will be promoted if you deserve it"), and 19 (" When applying for a job, all qualified applicants have a fair chance of being selected") are virtually identical. These items seem to point to human resource practices from which individuals may benefit. The mean scores for these items fall around a score of 3.00 (ranging between 2.36 and 3.20), indicating that people in both Clusters 6 and 5 have moderate to slightly low justice perceptions about these practices.

Despite these similarities, there are some significant differences between these two clusters. People in Cluster 5 have significantly lower mean item scores for items 1 ("The disciplinary procedures used are fair"), 2 ("Managers are, for the most part, fair in their dealings with employees"), 3 ("For the most part, relevant information is shared with all employees"), 4 ("Every employee will have a fair hearing when problems arise"), 11 ("Employees are paid a fair salary), 12 ("Punitive action taken against employees is, for the most part, fair"), 15 ("Grievances against managers are dealt with appropriately"), 16 ("Employees are part of the decision making process"), and 17 ("All employees are treated fairly"). These items

seem to point towards the collective relationship between management and employees, with particular emphasis on discipline and punishment in the organisation. While Cluster 5 has been characterised by people who are relatively satisfied with the collective relationship in the organisation, but less so with human resource practices that effect individual accomplishment, Cluster 6 seems to be following the opposite trend. People in this group appear to be more satisfied with human resources practices, but less so with the industrial relationship in the organisation. It is important to remember though, that while they are more satisfied with individual human resources practices, the scores for these items are similar to those at the bottom of the range for Cluster 5. As such people in Cluster 6 seem to have generally lower justice perceptions than those in Cluster 5 (and are significantly lower than people in Clusters 2 and 3). There are, however, a number of items where people in Cluster 6 scored higher than those in Cluster 5.

The most notable of such items is number 18 ("Everyone does there fair share of work") where there is a clear divergence between the 2 clusters. Cluster 6 moves relatively sharply up, and Cluster 5 equally as sharply down, bringing Cluster 6 clearly above Cluster 5. The mean score for this item for Cluster 5 is 2.12, marking it as one of the lowest scoring items for this cluster. The mean score for item 18 for Cluster 6 is 2.99, marking it as one of the highest scoring items for this cluster. At face value item 18 seems to be very similar to item 8 ("Work is allocated fairly"), where the 2 clusters scored almost identically (2.61 for Cluster 5 and 2.70 for Cluster 6). However these two items can be seen to be tapping in to 2 very different aspects of working relationships. By asking if work is allocated fairly, item 8 is asking respondents to comment on the actions of managers or supervisors – the people who allocate the work. Item 18, on the other hand, by asking whether everyone does their fair share of work, is asking respondents to comment on the actions of people who do the

work – employees, colleagues, and peers. As such item 8 can be seen to be a reflection on the relationship between management and employees, while item 18 is a reflection on the relationship between workers in the organisation. There are many items looking at a similar relationship to that in item 8, but it appears that only item 18 asks for comment on the behaviour of colleagues. Clearly people in Cluster 6 have a higher perception of justice regarding such behaviour than those in Cluster 5.

A second item where Cluster 6 scores noticeably higher than Cluster 5, is number 22 ("When a position becomes available, the post is advertised so as many people as possible will hear of the vacancy"). This item is the highest scoring item for Cluster 6 (3.62). It refers to a very specific aspect of job recruitment and selection practices, and as such might seem unusual for people to feel particularly strongly about. However this item also forms a high point for Clusters 3, 1 and 4, and falls above the mean point in every cluster. As such it can be deduced that this is a practice that the organisation clearly and follows. Variations on the mean score for this item may be related to the extent to which people have had direct experience with looking for, or advertising, other jobs in the organisation. As such the difference in scores for this item between Clusters 5 and 6 may be related to peoples personal experience with recruitment in the organisation – people in Cluster 6 may be more actively looking for other jobs. This is supported by looking at the next highest scoring item for Cluster 6, which is item 13 ("Everyone has the opportunity to develop themselves professionally"). Both items refer to alternate job opportunities for employees.

People in Cluster 6 can, as such, be characterised as having moderate/moderately low organisational justice perceptions, being more dissatisfied with the collective relationship between management and employees than with practices that impact on individual well

being in the organisation. People in this cluster also seem to have more trust in their colleagues capacity to act fairly.

Cluster 4, the next cluster down, marks a much clearer move into lower justice perceptions, with the range of mean item scores falling between 1.32 and 3.79. The highest scoring item, item 22 ("When a position becomes available, the post is advertised so as many people as possible will hear of the vacancy"), is somewhat of an anomaly, however, as the next nearest item is 3.10 (item 9 – "Management gives representative unions their due respect and consideration"). Other than those 2 items, all the other items have a mean score between 1 and 2 – an indication of relatively low perceptions of organisational justice in that cluster. Looking at the higher scoring items, it can be seen that there are certain specific practices that the organisation seems to be engaging in quite effectively. As discussed with item 22 for Cluster 6 above, the practice of widely advertising vacancies in the organisation is something that appears to be a relative strength of human resources functioning. Similarly the relationship between the representative union and management appears to be identified as one of the least problematic areas of industrial relations functioning, as, like item 22, it is one of the highest scoring items for all clusters. For all clusters except Cluster 1 (to be discussed next), the mean item scores for these 2 items fall at 3.00 or above – an indication of neutrality or positive justice perceptions about these practices. Clearly there are standard, observable practices for these two areas of organisational functioning that would be difficult to contest.

Looking at the organisational policy on selection and recruitment, it is made clear that all posts have to be advertised on notice boards in every branch and factory (notice boards are situated in common room areas frequented by employees, such as canteens and change

rooms). In addition vacancies have to be advertised on the company intranet. Employees can, therefore, easily find out what current vacancies there are in the organisation, and be alerted to possible job opportunities. With regards to management-union relations, there are 2 unions recognised by the organisation, namely SACWU and SEPPAWU. These 2 unions are representative of the vast majority of employees. Monthly meetings are held with union representatives and management within each branch or factory, and regional meetings held every three months. All organisational initiatives, new practices, changes to practices, problems, queries and concerns are raised at these meetings. As discussed in Chapter 5, the current research had to be approved at both local and regional meetings by union representatives. It is clear that consultation with unions is built into the procedures for almost all organisational activities.

As such even people with low organisational justice perceptions, such as in this cluster, do not extend these negative justice perceptions to these organisational practices. Another high point for this cluster is item 18 ("Everyone does there fair share of work"). The mean score for this item is 2.73. While this is still indicative of moderately low justice perceptions, it is markedly higher than many other items in this cluster, as well as being higher for this item than Cluster 5 (comprising people with generally higher justice perceptions than Cluster 4). As discussed above for Cluster 6, this could be an indication that people in this cluster perceive aspects of the relations between employees as being more fair than between employees and managers.

The 3 lowest mean item scores for this cluster are item 7 ("Selection procedures used to fill vacancies are fair"), item 11 ("Employees are paid a fair salary") and item 16 ("Employees are part of the decision making process"). Item 7 presents an interesting contrast to the very

high score of item 22, also part of the selection and recruitment practices of the organisation. As discussed above, while employees in this cluster score relatively highly for the item referring to the advertisement of vacancies, they score particularly low (1.48) on the item related to selection procedures. As such while they feel they may hear about vacancies, clearly they feel that the way in which someone is selected to fill the vacancy is not fair. This contrast between items 22 and 7 seems to hold true for Clusters 5, 2, and 6 as well. With regards to item 11 concerning the fairness of salaries, this cluster has the lowest mean score (1.32) of all the clusters. This cluster clearly comprises people who have low distributive justice perceptions. Looking at item 16, concerning employees involvement in decision making, people in this cluster are also clearly feeling particularly alienated from such processes. As such this cluster comprises people who, while they are expressing neutrality regarding certain human resource practices, are generally feeling that the organisation treats employees unfairly. What defines this group more clearly has to be understood in relation to the last cluster, Cluster 1, also a very low scoring group of people.

Cluster 1 has a relatively low spread of mean item scores, with such scores ranging between 1.13 and 2.39. As such the perceptions of organisational justice are generally very low, and this cluster comprises the lowest scorers for almost every item. This cluster occupies a similar score range as Cluster 4, and there are certain similarities between these 2 clusters with regards to their score profiles. For example from item 17 to 24 they follow virtually the same score profile, with identical peaks and valleys, just with people in Cluster 1 scoring lower on those items than people in Cluster 4. This is also true for items 7-10. However there are also points of divergence for these 2 clusters, which can assist in differentiating these 2 groups of low scorers from one another.

The most noticeable area of divergence between the 2 clusters incorporates items 13 ("Everyone has the opportunity to develop themselves professionally"), 14 ("You will be promoted if you deserve it"), and 15 ("Grievances against managers are dealt with appropriately"), where the mean item scores in Cluster 1 drop very closely towards 1, yet move up towards (an above) 2 in Cluster 4. There is a similar divergence with regards to item 6 ("All employees have a fair chance of getting access to training"). While the scores for all of these items for both clusters are indications of low justice perceptions, it is clear that these items mark different areas of concern for people in the two groups. All the items in this group are arguably indicators of employees' sense of control over their capacity to progress in the organisation. The first two items refer directly to employees' scope for advancement in the organisations, while item 6 points to the means of accessing better opportunities in the organisation. The other item referring to grievances against managers can, in the context of the other items, be seen to be related to employees' sense of their capacity to act against decision-makers in relation to unfair immobility in the organisation. It is interesting to note that the lowest scoring item for this cluster, item 19, refers to the extent to which all qualified applicants for a job have a fair chance of being selected. Clearly people in Cluster 1 have very little sense of hope with regards to moving out of their current positions, and have particularly low justice perceptions about direct and related practices that would potentially enable them to do so. People in Cluster 4, on the other hand, while still having moderately low organisational justice perceptions seem to be less concerned with these types of visible, measurable organisational practices, and more concerned with practices that have less observable procedural mechanisms, such as employees being part of the decision making process (item 16).

There are a number of other items that mark important differences between the two clusters. The first of these areas of difference include items 1 (“The disciplinary procedures used are fair”), 2 (“Managers are, for the most part, fair in their dealings with employees”), 3 (“For the most part, relevant information is shared with all employees”), and 4 (“Every employee will have a fair hearing when problems arise”), where people in Cluster 1 have markedly lower perceptions than those in Cluster 4. A second set of items which follow a similar pattern include items 12 (“Punitive action taken against employees is, for the most part, fair”), 19 (“ When applying for a job, all qualified applicants have a fair chance of being selected”) and 20 (Managers and supervisors communicate effectively with their subordinates”). While these are clearly not areas of satisfaction for those in Cluster 4, people in Cluster 1 appear to be markedly more concerned about them. These items are all related to the relationship between management and employees, with there being a particular emphasis on discipline and punishment in the organisation. People in Cluster 1 clearly have less confidence with regards to these practices, as well as in the employment relationship than people in Cluster 2. This marks a clear area of concern for people in Cluster 1. For people in Cluster 4, however, there is a very strong sense of dissatisfaction with regard to reward and salary, with items 11 (Employees are paid a fair salary”) and 5 (“Employees are rewarded for their efforts”) being two of the lowest scoring items for this cluster.

As such these two clusters, while both having low organisational justice perceptions, are quite clearly differentiated by their areas of concern. People in Cluster 4 may be characterised by a strong distributive concern, as well as dissatisfaction with the less observable aspects of organisational practices. They tend to be more neutral towards established organisational human resources practices. People in Cluster 1, on the other hand, may be characterised as having a general sense of injustice regarding most

organisational practices. There is a particular emphasis on those practices that allow people to progress and develop within the organisation, as well as the quality of the relationship between managers and employees, particularly with regards to the use of authority.

The second cluster analysis was conducted with responses to the belief in a just world scale. From the Cluster History Profile (See Table 6.25) and the Dendrogram (See Figure 6.6), it can be seen that the first cluster (n=465) splits into Clusters 2 (n=338) and 8 (n=127) at a height of 0.1117. Cluster 2 then splits into Clusters 3 and 20 at a height of 0.0511. Following the branch emanating from Cluster 3, Clusters 4 and 5 emerge at a height of 0.0380. Cluster 4 (217) then splits into Clusters 7 and 6 at a height of 0.0336. Cluster 7 (n= 92) then splits into Clusters 10 and 26 at 0.0217, and Cluster 10 then splits into Clusters 14 (n=23) and 13 (n=42) at a height of 0.0183. Cluster 26 (n=27) splits much lower down at a height of 0.0077. Cluster 6 (n-125) splits into Clusters 18 and 9 at a height of 0.0230. Cluster 18 (n= 44) splits much lower down, at a height of 0.0108. Cluster 9 (n=81) splits into Clusters 16 (n=52) and 21 (n=29) at a height of 0.0187. Returning to Cluster 5 (n=95), there is a split into Clusters 11 (n=75) and 19 (n=21) at a height of 0.0249. The branch emanating from Cluster 20 (n= 26) splits much lower down, starting with Clusters 30 and 63 at a height of 0.0090. The second main branch starts with Cluster 8 (n=127) splitting into Clusters 15 and 12 at a height of 0.212. Cluster 15 (n=47) splits into Clusters 22 and 34 at a height of 0.0112. These two clusters then split much lower down. Cluster 12 (n=80) on the other hand, splits into clusters 28 and 32, which also, in turn, only split at a much lower height.

Table 6.23: Cluster History (Organisational Justice Perceptions)

NCL	Clusters Joined		FREQ	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Tie
30	CL40	CL43	34	0.0042	.616	.343	142	23.2	4.6	
29	CL78	CL82	8	0.0042	.611	.338	144	23.7	4.3	
28	CL66	CL45	19	0.0045	.607	.333	145	24.2	4.1	
27	CL69	CL38	18	0.0045	.602	.328	147	24.7	3.8	
26	CL67	CL50	17	0.0045	.598	.322	149	25.3	4.2	
25	CL52	CL35	45	0.0047	.593	.317	151	25.9	5.7	
24	CL37	CL36	30	0.0047	.588	.311	150	26.5	4.3	
23	CL42	CL48	16	0.0048	.584	.306	149	27.3	3.7	
22	CL31	CL70	63	0.0050	.579	.299	148	28.1	6.1	
21	CL109	CL26	24	0.0052	.573	.293	148	28.9	4.4	
20	CL21	CL34	38	0.0054	.568	.286	147	29.8	4.5	
19	CL28	CL54	25	0.0055	.563	.279	146	30.9	4.2	
18	CL49	CL44	59	0.0055	.557	.272	146	32.0	8.2	
17	CL24	CL39	53	0.0055	.552	.264	146	33.4	5.3	
16	CL32	CL158	24	0.0057	.546	.256	146	34.9	5.7	
15	CL33	CL29	29	0.0058	.540	.248	147	36.6	4.9	
14	CL53	CL23	36	0.0062	.534	.239	147	38.5	5.8	
13	CL18	CL438	61	0.0065	.527	.230	147	40.7	8.8	
12	CL15	CL27	47	0.0068	.521	.220	148	43.3	5.0	
11	CL30	CL46	41	0.0072	.513	.210	149	46.4	7.0	
10	CL14	CL68	54	0.0077	.506	.198	151	50.1	7.2	
9	CL20	CL16	62	0.0083	.497	.185	154	54.7	6.5	
8	CL22	CL25	108	0.0089	.488	.171	158	60.4	10.0	
7	CL17	CL12	100	0.0100	.478	.156	163	67.9	7.7	
6	CL7	CL19	125	0.0108	.468	.139	171	78.2	7.7	
5	CL6	CL11	166	0.0165	.451	.120	179	91.6	11.8	
4	CL9	CL10	116	0.0237	.427	.098	190	111	18.2	
3	CL8	CL13	169	0.0371	.390	.072	205	143	40.3	
2	CL5	CL4	282	0.0936	.297	.041	206	189	62.6	
1	CL3	CL2	451	0.2966	.000	.000	0.00	.	189	

Figure 6.4: Dendrogram for Organisational Justice Perceptions

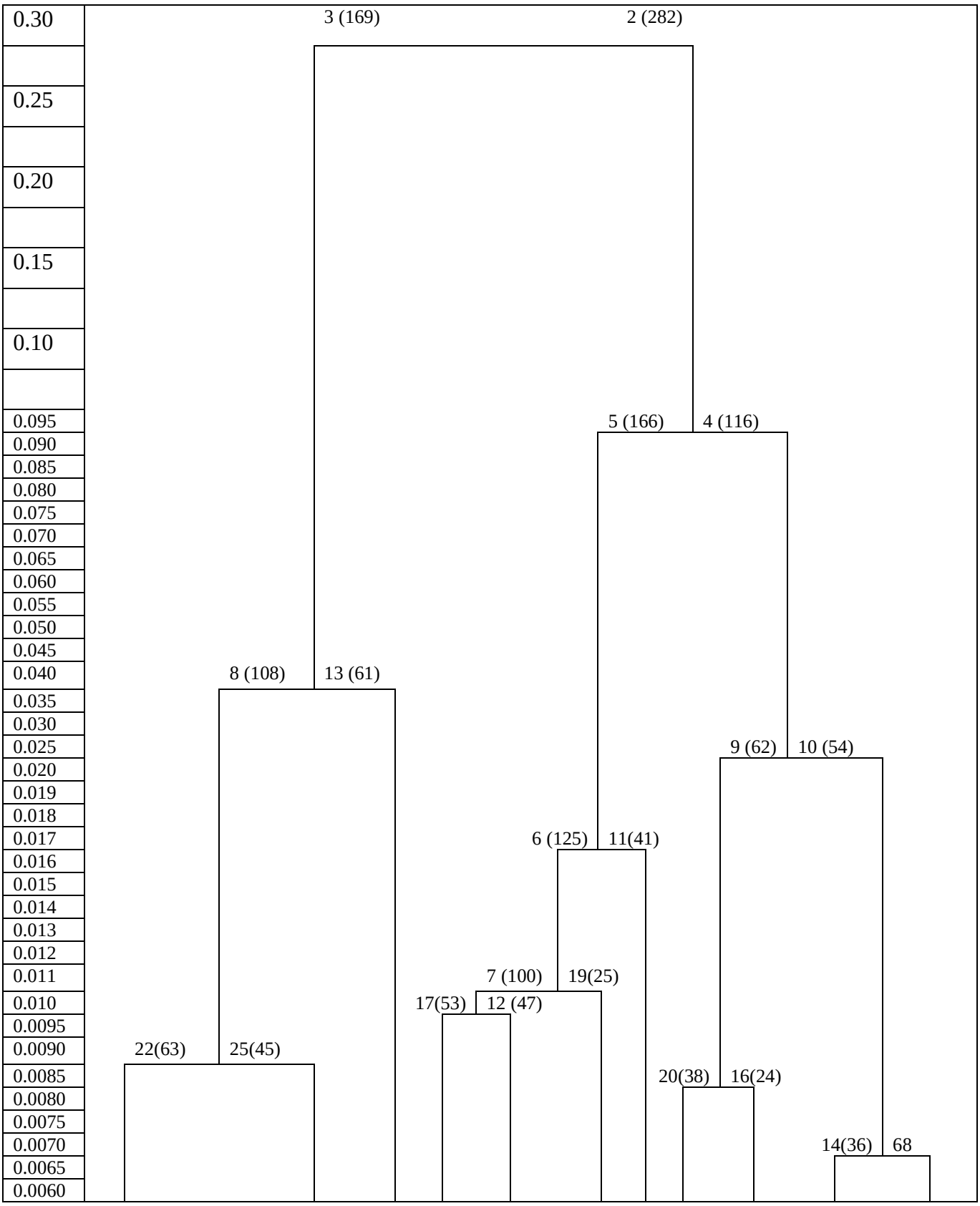


Table 6.24: Cluster Composition- Organisational Justice Perceptions

CLUSTER	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
1	54	OJ1	1.74	1.17	1	5
		OJ2	1.31	0.64	1	4
		OJ3	1.56	1.08	1	5
		OJ4	1.59	0.96	1	5
		OJ5	1.81	1.29	1	5
		OJ6	1.30	0.57	1	3
		OJ7	1.17	0.42	1	3
		OJ8	1.37	0.76	1	4
		OJ9	2.24	1.13	1	5
		OJ10	1.43	0.98	1	5
		OJ11	1.39	0.86	1	4
		OJ12	1.71	0.91	1	4
		OJ13	1.19	0.44	1	3
		OJ14	1.15	0.41	1	3
		OJ15	1.28	0.56	1	3
		OJ16	1.43	0.88	1	5
		OJ17	1.22	0.54	1	4
		OJ18	2.15	1.38	1	5
		OJ19	1.13	0.39	1	3
		OJ20	1.54	0.84	1	4
		OJ21	1.41	0.81	1	4
		OJ22	2.39	1.53	1	5
		OJ23	1.31	0.64	1	4
		OJ24	1.30	0.79	1	5
2	108	OJ1	3.76	0.72	1	5
		OJ2	3.60	0.75	1	5
		OJ3	3.29	0.90	1	5
		OJ4	3.81	0.71	2	5
		OJ5	3.49	0.89	1	5
		OJ6	3.75	0.87	1	5
		OJ7	3.38	0.82	1	5
		OJ8	3.35	0.78	2	5
		OJ9	3.68	0.66	1	5
		OJ10	3.35	0.93	1	5
		OJ11	2.97	0.94	1	5
		OJ12	3.53	0.70	1	5
		OJ13	3.79	0.72	2	5
		OJ14	3.55	0.78	2	5
		OJ15	3.47	0.71	2	5
		OJ16	3.13	0.83	1	5
		OJ17	3.49	0.69	2	5
		OJ18	3.05	0.94	1	5
		OJ19	3.36	0.88	1	5
		OJ20	3.29	0.75	2	4
		OJ21	3.27	0.69	1	5
		OJ22	3.71	0.76	2	5

Table 6.24: Cluster Composition- Organisational Justice Perceptions Contd…

CLUSTER	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
		OJ23	3.17	0.83	1	5
		OJ24	3.23	0.82	1	5
3	61	OJ1	4.36	0.61	2	5
		OJ2	4.31	0.62	2	5
		OJ3	4.35	0.65	2	5
		OJ4	4.10	0.85	1	5
		OJ5	4.08	1.00	1	5
		OJ6	4.39	0.71	2	5
		OJ7	4.33	0.72	1	5
		OJ8	4.18	0.56	3	5
		OJ9	4.28	0.71	3	5
		OJ10	4.28	0.69	2	5
		OJ11	3.89	0.88	1	5
		OJ12	4.15	0.77	2	5
		OJ13	4.23	0.56	3	5
		OJ14	4.21	0.88	1	5
		OJ15	4.02	0.74	1	5
		OJ16	3.89	0.91	1	5
		OJ17	3.93	0.93	1	5
		OJ18	3.90	0.98	1	5
		OJ19	4.28	0.61	3	5
		OJ20	4.18	0.62	2	5
		OJ21	4.26	0.68	2	5
		OJ22	4.57	0.53	3	5
		OJ23	4.28	0.61	3	5
		OJ24	4.31	0.70	2	5
4	62	OJ1	2.19	0.99	1	4
		OJ2	1.97	0.96	1	4
		OJ3	2.18	0.91	1	4
		OJ4	2.44	0.99	1	4
		OJ5	1.68	0.84	1	4
		OJ6	2.37	1.27	1	5
		OJ7	1.48	0.62	1	3
		OJ8	2.01	0.88	1	4
		OJ9	3.10	1.13	1	5
		OJ10	1.94	0.90	1	4
		OJ11	1.32	0.51	1	3
		OJ12	2.40	0.91	1	4
		OJ13	2.47	1.35	1	5
		OJ14	1.94	1.04	1	4
		OJ15	1.93	0.97	1	4
		OJ16	1.35	0.52	1	3
		OJ17	1.69	0.78	1	4
		OJ18	2.73	1.19	1	5
		OJ19	1.76	0.92	1	4
		OJ20	2.44	1.11	1	5
		OJ21	1.73	0.77	1	4
		OJ22	3.79	0.98	1	5
		OJ23	2.13	1.05	1	5
		OJ24	2.24	0.88	1	4

Table 6.24: Cluster Composition- Organisational Justice Perceptions Contd…

CLUSTER	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
5	41	OJ1	3.78	0.72	2	5
		OJ2	3.73	0.74	2	5
		OJ3	3.63	0.83	2	5
		OJ4	3.54	0.92	2	5
		OJ5	2.37	0.80	1	4
		OJ6	3.51	1.05	2	5
		OJ7	2.44	0.87	1	4
		OJ8	2.61	0.77	1	4
		OJ9	3.48	0.81	1	5
		OJ10	2.85	0.88	1	4
		OJ11	2.40	0.83	1	4
		OJ12	3.56	0.78	2	5
		OJ13	3.29	1.10	1	5
		OJ14	2.68	0.96	1	5
		OJ15	2.80	0.90	1	4
		OJ16	2.80	0.95	1	4
		OJ17	2.76	0.83	1	4
		OJ18	2.12	0.78	1	4
		OJ19	2.54	1.10	1	5
		OJ20	2.56	1.00	1	5
		OJ21	2.10	0.62	1	3
		OJ22	3.05	1.16	1	5
		OJ23	2.46	0.74	1	4
		OJ24	2.12	0.71	1	4
6	125	OJ1	2.69	1.09	1	5
		OJ2	2.38	1.01	1	5
		OJ3	2.74	1.00	1	5
		OJ4	2.91	0.98	1	5
		OJ5	2.91	1.05	1	5
		OJ6	2.97	1.11	1	5
		OJ7	2.36	0.93	1	5
		OJ8	2.70	1.02	1	5
		OJ9	3.06	0.98	1	5
		OJ10	2.90	1.02	1	5
		OJ11	1.94	0.88	1	5
		OJ12	2.72	0.83	1	5
		OJ13	3.21	1.10	1	5
		OJ14	3.00	1.02	1	5
		OJ15	2.13	0.82	1	4
		OJ16	2.38	1.03	1	5
		OJ17	2.28	0.90	1	5
		OJ18	2.99	1.13	1	5
		OJ19	2.62	0.95	1	5
		OJ20	2.74	0.98	1	5
		OJ21	2.50	0.83	1	5
		OJ22	3.62	1.04	1	5
		OJ23	2.60	0.85	1	4
		OJ24	2.66	0.99	1	5

Figure 6.5: Organisational Justice Items Mean Score Cluster Profile

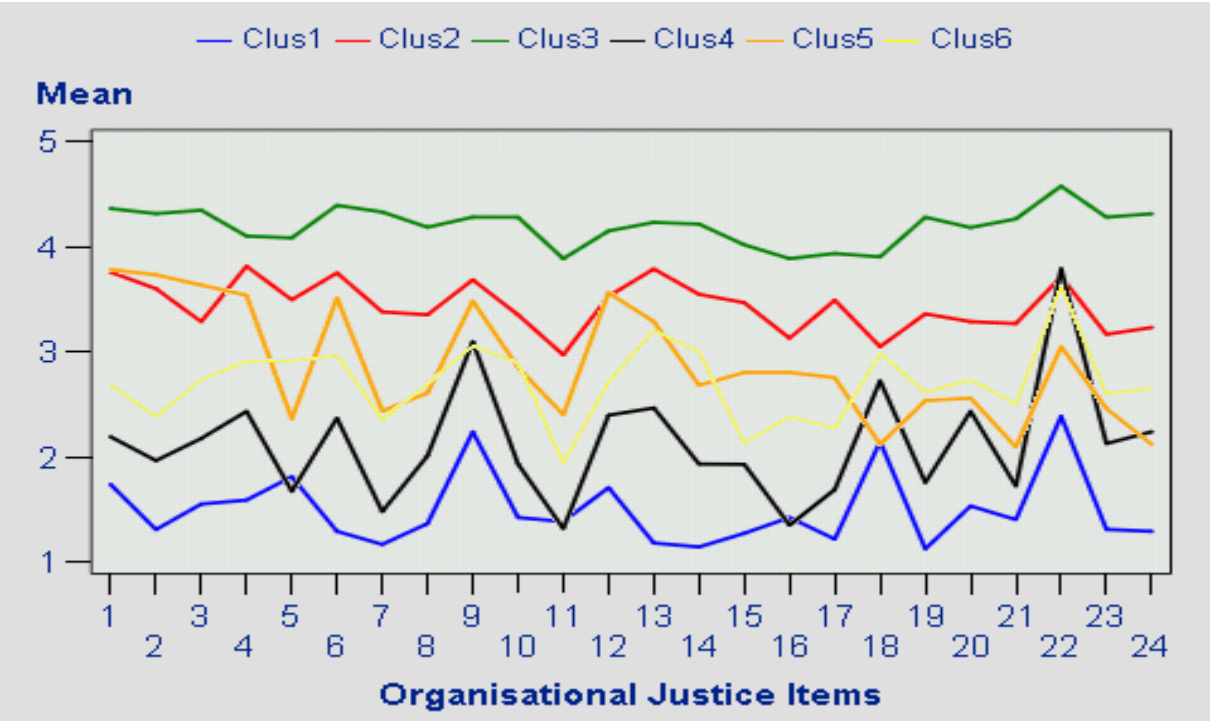
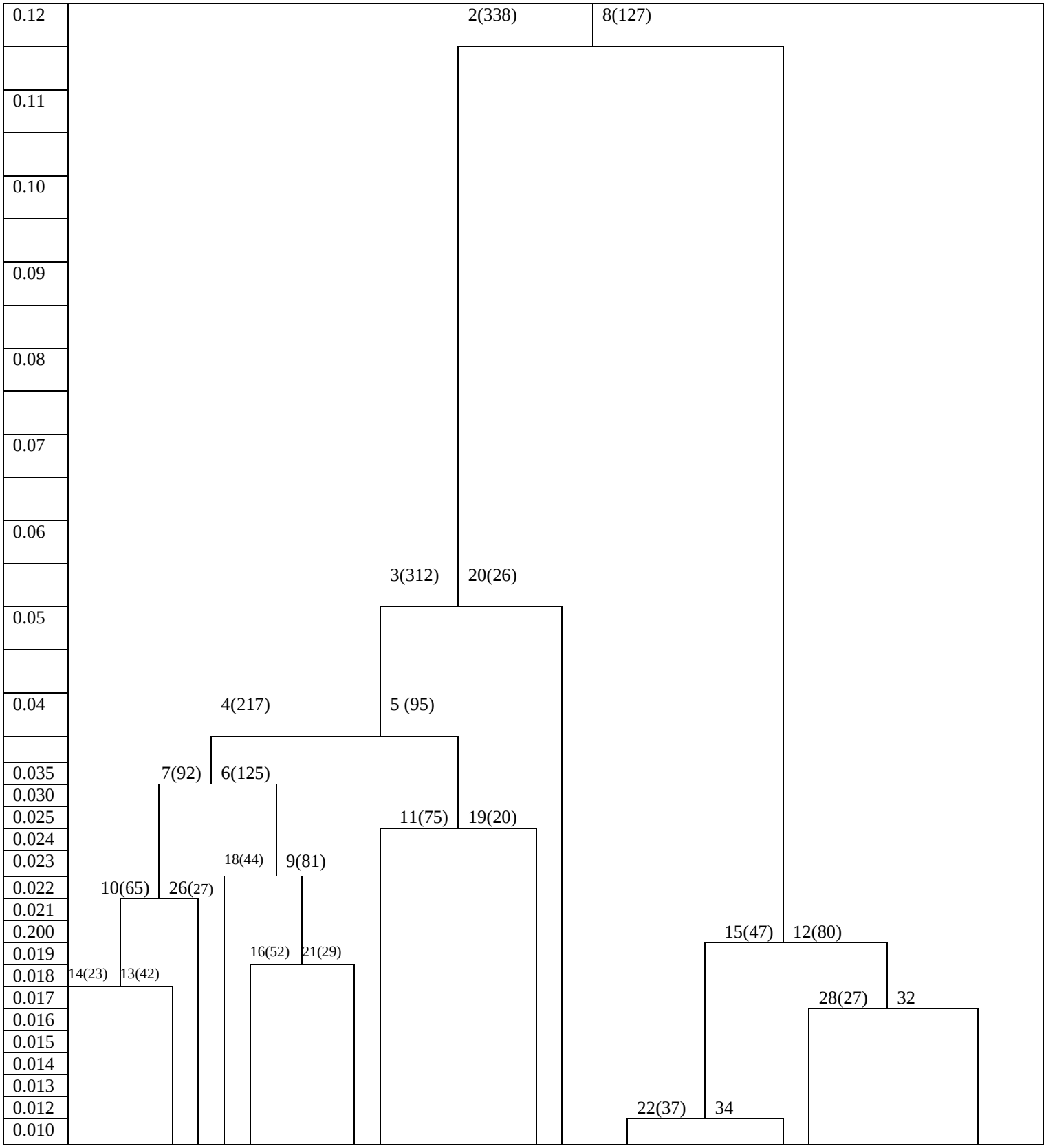


Table 6:25: Cluster History (Belief in a Just World)

NCL	Clusters Joined		FREQ	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Tie
30	CL46	CL231	19	0.0070	.554	.528	6.21	18.6	7.5	
29	CL40	CL56	29	0.0071	.547	.523	5.73	18.8	7.1	
28	CL49	CL71	27	0.0072	.540	.518	5.26	19.0	8.5	
27	CL50	CL410	18	0.0073	.533	.512	4.82	19.2	8.4	
26	CL35	CL58	27	0.0077	.525	.507	4.31	19.4	6.9	
25	CL60	CL65	22	0.0080	.517	.501	3.80	19.6	8.1	
24	CL52	CL51	18	0.0080	.509	.495	3.34	19.9	6.9	
23	CL53	CL37	35	0.0082	.501	.488	2.89	20.1	8.3	
22	CL57	CL64	37	0.0086	.492	.482	2.40	20.4	11.5	
21	CL39	CL83	29	0.0089	.483	.475	1.90	20.8	7.7	
20	CL30	CL63	26	0.0090	.474	.468	1.46	21.1	7.1	
19	CL36	CL47	20	0.0095	.465	.461	0.98	21.5	5.9	
18	CL48	CL29	44	0.0108	.454	.453	0.27	21.9	9.1	
17	CL23	CL25	57	0.0109	.443	.445	-.37	22.3	8.7	
16	CL27	CL43	52	0.0109	.432	.436	-.90	22.8	11.5	
15	CL22	CL34	47	0.0112	.421	.427	-1.4	23.4	11.2	
14	CL42	CL31	23	0.0113	.410	.417	-1.8	24.1	10.1	
13	CL33	CL38	42	0.0147	.395	.406	-2.8	24.6	11.0	
12	CL28	CL32	80	0.0160	.379	.395	-4.0	25.1	18.3	
11	CL24	CL17	75	0.0168	.362	.381	-4.6	25.8	11.6	
10	CL14	CL13	65	0.0183	.344	.363	-4.6	26.5	11.2	
9	CL16	CL21	81	0.0187	.325	.343	-4.1	27.5	15.0	
8	CL15	CL12	127	0.0212	.304	.321	-3.8	28.5	18.9	
7	CL10	CL26	92	0.0217	.282	.296	-3.1	30.0	12.4	
6	CL18	CL9	125	0.0230	.259	.267	-1.7	32.1	16.0	
5	CL11	CL19	95	0.0249	.234	.233	0.42	35.2	14.4	
4	CL7	CL6	217	0.0336	.201	.192	2.04	38.6	19.1	
3	CL4	CL5	312	0.0380	.163	.142	5.35	44.9	19.7	
2	CL3	CL20	338	0.0511	.112	.081	10.3	58.2	25.4	
1	CL2	CL8	465	0.1117	.000	.000	0.00	.	58.2	

Figure 6.6: Dendrogram - Belief in a Just World



Two cluster solutions emerge as being potentially useful from observing the dendrogram. The first is a three cluster solution, eliminating all clusters after Clusters 8, 3, and 20, where the splits start happening much closer together. However another potential solution is to retain six clusters, namely Clusters 7,6,11,19,20 and 8. The cluster sizes at that level are still suitably large, and the splits are not yet too close together. A six-cluster solution may also be more appropriate for this study, in that it could offer more insight into the complexity of perceptions of justice.

Given that in deciding how many clusters to retain, a possible three-cluster or six-cluster solution has been identified, both these solutions have been explored further.

Beginning with a three-cluster solution, it can be seen from the Cluster Composition Table (See Table 6.26) that Cluster 1 comprises 185 people, cluster 2 170 people, and Cluster 3 110 people. With regards to the item mean scores, these range between 2.49 and 3.58 in Cluster 1, 2.97 and 4.52 in Cluster 2, and 3.25 and 4.60 in Cluster 3. Cluster 1 comprises mainly mean item scores of around 2, Cluster 2 mean item scores of around 3, and Cluster 3 of a mixture between mean item scores of around 3 and 4. With regards to the minimum and maximum scores, in Cluster 1 the minimum score for all the items is 1 and the maximum score is 5. The same is true for Cluster 2, except for item 12, where the maximum score is 4. For Cluster 3, most items have a minimum score of 1, except for items 6,7, and 11 where the minimum score is 2, and item 15 where the minimum score is 3. The maximum score for all the items in this cluster is 5.

From the line plot of the mean item scores per cluster (See Figure 6.7) an initial analysis reveals that Cluster 1, for the most part, comprises lower scoring people, Cluster 2 moderate scoring people, and Cluster 3 people who are scoring slightly higher than moderate. It can be seen that

up to item 7 (just world item 12), for the most part each cluster is relatively consistent across all the items. At item 7 Cluster 1 dips sharply to a mean score below 3, where it intersects with Cluster 2 which has been dipping gradually from item 4. Cluster 1, however, starts increasing at item 7, with that item representing the third highest mean for that cluster. All the clusters move back up again for item 8 (just world item 14). For item 9 (just world item 15), Cluster 3 keeps on rising reaching the highest mean score for that cluster, Cluster 2 remains consistent with item 8, and Cluster 1 drops. At item 10 (just world item 18), Cluster 3 dips sharply as does Cluster 2, while Cluster 1 also reaches a valley at that point. All three clusters rise sharply for item 11 (just world item 19).

With regards to the six-cluster solution, from the Cluster Composition Table (See Table 6.27) it can be seen that Cluster 1 comprises 29 people, Cluster 2 comprises 97 people, Cluster 3 110 people, Cluster 4 140 people, Cluster 5 73 people, and Cluster 6 16 people. The mean item scores in Cluster 1 range between 1.59 and 3.17, between 2.84 and 4.49 in Cluster 2, between 2.74 and 4.61 in Cluster 3, between 2.78 and 3.94 in Cluster 4, between 2.44 and 4.56 in Cluster 5, and between 1.19 and 3.68 in Cluster 6. With regards to the minimum and maximum scores, in Cluster 1 the minimum score for all the items is 1, but the maximum score is 5 for only 5 of the items. For items 3 and 9 the maximum score is 4, and for items 11, 15, 18, and 19 the maximum score is 4. For Cluster 2 the minimum score for the majority of items is 1, but for items 3 and 15 this score is 2, and for item 19 it is 3. The maximum score for the majority of items in this cluster is 5, except for items 12 and 14, where the maximum score is 4. In Cluster 3, there are a number of items that do not have a minimum score of 1 – items 6,7, and 11 have a minimum score of 2, and item 15 has a minimum score of 3. All the items have a maximum score of 5. In Cluster 4, the minimum score for all the items is 1, and the maximum score for all the items is 5. In Cluster 5 all the items have a minimum score of 1, except items 6 and 14,

where the minimum score is 2. The maximum score for all the items is 5, except for item 12 where the maximum score is 4. Finally, in Cluster 6 the minimum scores for all the items are 1, except for item 7, where the minimum score is 2. The maximum score for the majority of items is 5, except for items 2, 3, and 18 where the maximum score is 4, and item 19 where the maximum score is 2.

From the line plot of the item mean scores for each cluster (See Figure 6.8) a number of similarities and differences between the clusters can be observed. Starting at item 1, all the clusters move up to item 2 except for Cluster 1, which dips down to slightly below 2. For item 3 Cluster 1 begins rising again, and Clusters 6 and 5 continue increasing, while Clusters 2 and 3 remain relatively level and Cluster 4 drops comparatively sharply. At item 4, Clusters 6,5 and 3 rise, while Clusters 1 and 4 drop. Cluster 2 also drops, but very slightly. For item 5, Cluster 1 remains relatively level, as does Cluster 3. Cluster 6 continues to rise, this item forming the peak for that cluster. Cluster 4 also rises, but very gently. Cluster 5 drops sharply for this item, with Cluster 2 also dropping, but much more gently. There is very little similarity between any of the clusters in relation to item 5. For item 6 Clusters 1, 4, 2 and 3 drop very gently, with Clusters 6 and 2 also dropping, but much more steeply. This results in Clusters 6,5,4, and 2 meeting very closely around a mean score of just under 3. At item 7 the clusters all move towards a mean score slightly under 3. Cluster 1 rises sharply, while Cluster 3 drops sharply, and the other four clusters continue their previous directions. In particular, Clusters 2, 3, and 1 all intersect at item 7. For item 8, Cluster 1 drops back sharply again, while Clusters 5, 3, 6, and 4 all rise relatively sharply. Cluster 2 remains level. For item 9 Clusters 1 and 6 remain relatively level, while Clusters 2 and 3 rise quite sharply, and Clusters 4 and 5 drop quite sharply. All the clusters drop to varying degrees for item 10, except for Cluster 1 where there is a slight increase. Clusters 2 and 3 intersect at a mean score of 3. 25 for this item. For item 11,

all the clusters except Cluster 6 increase sharply, with Clusters 2,3, and 5 intersecting at a mean score of around 4.50. Cluster 6 drops very sharply for this item, to 1.187, the lowest score for that cluster, and in fact the lowest mean score out of all the clusters.

From looking at the cluster sizes and composition, it can be seen that the six-cluster solution perhaps offers a more complex and interesting result. With the three-cluster solution, the cluster sizes are relatively large, and the clusters seem, for the most part, to be splitting into low, moderate, and high scores. While this could be a useful solution, as the aim of the research is to attempt to account for the complexity of justice perceptions, the six-cluster solution appears to be more appropriate. This solution has produced some interesting patterns, with some similarities and differences between clusters, but which is not simply about low, medium or high scores. As such, the six-cluster solution has been retained.

Looking at the belief in a just world six-cluster solution, it can be seen that there are more areas of overlap, and less distinct range of scores for the different clusters than there were for the organisational justice perceptions solutions. There are a number of notable features of this cluster solution, perhaps the most apparent being the merging of the clusters around the 3 mark for item 7 ("When parents punish their children, it is almost always for a good reason"). The scores for this item range between 2.60 (for Cluster 5) and 3.09 (for Cluster 6). This is a very small range, and is a clear indication that this particular item is not very useful in differentiating between groups. In addition to this all clusters are veering towards a mean score of 3 for this item ("Neither agree nor disagree"), indicating that this item is not very useful in differentiating between people's experiences of social justice. It would appear that most people neither agreed nor disagreed with this statement.

The item in question can perhaps be criticised as being difficult to answer with any conviction, as it is asking people's opinions on something that they would presumably know relatively little about. The punishment of children is a relatively private phenomenon, unlike most of the other items in the scale which either refer to events and issues that are, more clearly, cause for public concern (e.g. It is rare for an innocent man to be sent to jail), or are more general in nature (e.g. Basically the world is a just place). Even other very specific items such as "Students almost always deserve the grades they get at school" can be understood to be referring to the education system at large, rather than to a case by case basis. It is not entirely surprising that the majority of people might not actually know whether the statement about children deserving punishment is true or not. The scale, in relation to its original intention, is aiming to assess a more general attitude or trait regarding feelings of fairness in the world, and therefore ostensibly assumes that such a trait will cause a 'generalisation' of attitude to all types of issues or events (Rubin and Peplau, 1973). As such, if the theoretical notion of belief in a just world is in fact true, such an item could be expected to elicit a response similar to all other questions, regardless of the domain of these questions. This, however, did not happen in the case of this study. This is perhaps because in this study the belief in a just world scale (Rubin & Peplau, 1973) is being used as a measure of social justice perceptions – in other words as a collection of statements regarding people's social world about which they are likely to have some experience of justice. The nature of the study was very carefully explained to participants, both in writing (See Appendix A) and verbally by shop stewards and research assistants. As such this question might have seemed very out of place in the context of all the other questions, which referred to matters of much more wide spread concern. As discussed above, however, the item in question is likely to be difficult for anyone to answer in any context, unless one is operating

on the basis of a ‘psychological generalisation’. As such this item has proven to not be particularly useful in differentiating between cluster profiles.

Another notable feature of this clustering solution is the fact that relatively few of the items have a mean score above 4 or below 1. Unlike the organisational justice perceptions clustering solution, there are no clusters of people that are either very high or very low scoring. This might be an indication that there might have been a generalised tendency towards 3, as a neutral point, or that people in the current sample did not feel particularly strongly about the issues presented. There were, however, three items that did elicit more definite and extreme responses from participants. These include items 8 (“Although evil men may hold political power for a while, in the general course of history good wins out”) – which had a mean score range of 1.66 to 4.15 -, item 9 (“In almost any business or profession, people who do their job will rise to the top”) – which had a mean score range of 1.59 to 4.33 -, and item 11 (“Crime doesn’t pay”) – which had a mean score range of 1.19 to 4.60.

As can be seen, these items elicited a wide range of responses, with extreme points of view. All three items can be seen to be of particular concern within the South African context, and to people participating in the current study. Item 8 refers to evil political regimes, and the extent to which history sees good winning over evil. This is obviously something that has particular resonance for South Africans. After 40 years of an oppressive political dispensation that served to oppress the majority of citizens, a new democratic political order has emerged. Having lived through a historically significant change in power in the country, people are likely to have very strong opinions about this particular item. Also very pertinent to South Africans is the question of crime, which is particularly rife and often violent in this

country. The question of crime prevention and the apprehension and punishment of criminals forms a core part of political campaigning, medial coverage, public demonstration, the formation of non-governmental organisations, as well as a whole range of other civil activities. Crime forms a central concern for most South Africans, and has become loaded with political over tones related to race, gender, class as well as other demographic variables. As such it is unsurprising that an item focussing on crime, such as item 11, elicits such diverse and extreme responses. The final item, item 9, refers to professional development, and the extent to which people control their own rise to the top. As has been seen in the previous cluster analysis related to organisational justice perceptions, this issue is a highly contested one. It is important to look to the nature of the sample in understanding responses to this item. At least half of the sample comprises unionised, largely 'blue collar' workers. Many of the employees doing semi or unskilled jobs - approximately 200 of the respondents are general factory workers or technical staff (See Table 5.2 in Chapter 5), and only 70 respondents form part of the managerial or supervisory function of the organisation (See Table 5.2 in Chapter 5). For many of the people in the organisation it is unlikely that even if they did do their jobs well they would be able to assume a managerial role in the organisation. Concern about their ability to advance in the organisation was clearly demonstrated in some of the clusters of the previous analysis, while it was equally as evident that people in other clusters felt that there was ample opportunity and organisational support. Similar to the other two items, it is unsurprising that this item should elicit a wide range of responses.

Looking more specifically at each cluster, it can be seen that Cluster 3 comprises the highest scoring people for most of the items in this scale. Most of the items have a mean score close to, or slightly above 4, indicating agreement with the statements. Notable exceptions include

item 1 (“Basically, the world is a just place”), which has a mean score of 3.38, item 7 (“When parents punish their children, it is almost always for a good reason”), with a mean score of 2.74, and item 10 (“People who meet with misfortune have often brought it on themselves”), with a mean score of 3.25. Given the previous discussion regarding item 7 and the fact that it is non-discriminating, this item will not be explored for each cluster. Item 1 and item 10 are general items, which ask respondents to make broad judgements about the world and people at large. A mean score of around 3 indicates a ‘neither agree nor disagree’ attitude towards the statements. As such people in this cluster perhaps feel uncomfortable making broad generalisations, and rather remain neutral for non-specific items. Aside from item 7, item 10 is the lowest scoring item for this cluster. Item 11, (“Crime doesn’t pay”) is the highest scoring item for this cluster, with a mean score of 4.61. Clearly people in this cluster believe that those engaging in crime will ultimately fail to benefit from it. This cluster thus comprises people who believe that justice will, for the most part, be done, both at a personal and a broader social level – that if you work hard you will get good marks, will be promoted, will stay healthy, but also that key social institutions such as the political system, and the criminal justice system, will prevail.

There is considerable overlap between the next three clusters, Clusters 2, 4, 5, and 6 and it is therefore difficult to state which is the next one ‘down’, as was possible in the previous cluster analysis. For the purposes of a systematic analysis, clusters will be discussed in order of the mean score for the first item (i.e. in descending order of starting points). Cluster 2 has the highest mean score for item 1, and as such will be discussed next. This cluster appears to have mean item scores that group largely around 3, indicating that for the most part, people in this cluster were undecided about many of the items. The range of scores for this cluster was relatively small, with the lowest score being 2.84 (for item 8 “Although evil men may

hold political power for a while, in the general course of history good wins out") and the highest 4.49 (for item 11, "Crime doesn't pay"). This high score, however, is somewhat of an anomaly – the score for this particular item is significantly higher than the next highest item, which is item 9 with a score of 3.69. In fact a range of between 2.84 and 3.69 is more representative of the nature of this cluster, which, as mentioned before, is a largely undecided grouping of people. Despite this, there are a number of items for which people scored relatively higher, which may help to further define this cluster.

Aside from the very high scoring item 11 ("Crime doesn't pay"), there are three other items for which the mean score is 3.5 or above. These include item 2 ("People who get 'lucky breaks' have usually earned their good fortune") with a mean score of 3.54, item 3 ("Students almost always deserve the grades they get at school") with a mean score of 3.59), and item 9 ("In almost any business or profession, people who do their job will rise to the top") with a mean score of 3.69. While the mean scores for these three items do not indicate clear agreement, they are certainly indicative of a somewhat less neutral or undecided stance. These items appear to indicate a clear work ethic – those individuals who work hard, be it at school or at work, will derive the benefits they deserve. Good fortune or lucky breaks are, in fact, things which people earn through hard work. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. As such people in this cluster can be characterised as being largely undecided, particularly with regards to the fairness of broader social systems. However, they do seem to feel a little more strongly about individual effort and reward, believing that at a personal level you are more likely to benefit from your own efforts.

The next cluster for discussion is Cluster 4, which can, to some extent, be seen as a mirror image of Cluster 2. This cluster also largely comprises mean item scores relatively close to 3 (indicating fairly undecided scorers), but where there are deviations about this mid-score, they tend to be in the opposite direction to the ones discussed in Cluster 2 above. For example, where Cluster 2 lies above 3 for items 3 ("Students almost always deserve the grades they get at school"), 4 ("Men who keep in shape have little chance of suffering a heart attack"), 5 ("It is rare for an innocent man to be wrongly sent to jail"), and 10 ("People who meet with misfortune have often brought it on themselves"), Cluster 4 moves below this mid point. Where Cluster 2 moves below 3 for item 8 ("Although evil men may hold political power for a while, in the general course of history good wins out") it moves above 3 for Cluster 4. This is perhaps an indication that people in Cluster 4 put less faith in the belief that one's own hard work will be paid off than those in Cluster 2 - students who work hard, or men who keep healthy might still be in danger of getting poor grades or having a heart attack, while a man innocent of a crime might still be sent to jail. A person is not all that likely to bring misfortune on himself or herself. On the other hand, people in Cluster 4 seem to have a slightly stronger belief that broader social systems will, in the long run, be fair, while the opposite is true for those in Cluster 2.

There are other important differences between Clusters 2 and 4. Cluster 4 has more mean item scores in the 2's than Cluster 2, where the majority of scores are in the 3's. This is an indication that while people in Cluster 4 are, like those in Cluster 2, somewhat undecided in their scoring, there is more of a tendency towards a slightly lower perception of social justice. As such people in Cluster 4 may be characterised as generally neutral to moderately low scorers, who have less faith in an individual's capacity to influence their own outcomes.

Looking next at Cluster 5, it can be seen that people in this group have a relatively varied set of responses to the different items. Mean scores in this cluster range from 2.44 to 4.56, a somewhat wider range than most of the other clusters. Despite this, there are essentially only five items that are markedly removed from a neutral score of 3.The lowest scoring item for this cluster is item 10 ("People who meet with misfortune have often brought it on themselves"), with a mean score of 2.44. This indicates that people in this cluster do not necessarily believe that "bad things happen to bad people" – i.e. bad things can happen to people who do not deserve them. On the other hand there are two items for which this cluster has a mean score over 4. These include item 8 ("Although evil men may hold political power for a while, in the general course of history good wins out") with a mean score of 4.15, and item 11 ("Crime doesn't pay") with a mean score of 4.56. In addition to these high scoring items, there are two other items that score fairly close to 4, indicating agreement with the statements. These include item 3 ("Students almost always deserve the grades they get at school") with a mean score of 3.71, and item 4 ("Men who keep in shape have little chance of suffering a heart attack") with a mean score of 3.83. It would seem that there are two sets of beliefs that are indicated by this pattern of scoring. On the one hand, while people in this cluster do not believe that people always deserve their misfortune, they seem to feel more strongly about people deserving their own good fortune – students who work hard get good grades, men who keep in shape will not have heart attacks. As such there seems to be the perception within this cluster that bad things can happen to you at random, but that good things result from effort exerted by the person. A second set of related beliefs seemingly emerging within this cluster centres on belief, at a broader level, on ideas about retribution and the triumph of justice. There is a belief that ultimately, good will win out and bad will be punished, both at an individual level and within broader systems - a

criminal's activities will eventually catch up with him, an evil political regime will eventually be ousted

As such, people in this cluster can be characterised as having an almost fatalistic approach to injustice or misfortune, while on the other hand they have a stronger sense of agency when related to the achievement of good. Despite their beliefs related to misfortune, there is also a strong belief that ultimately, justice will prevail.

Looking at Cluster 6 it can be seen that people in this group have fairly extreme views about a number of issues, with a slight tendency to towards lower mean scores than the previous clusters. The mean item scores in this cluster range from 1.19 to 3.94. While this represents a fairly large range of scores, the majority of scores are 3 or below, with no scores reaching the "agree" level of a 4. This cluster has the lowest scoring item out of all the clusters - item 11 ("Crime doesn't pay") with a mean score of 1.19 – for which all the other clusters scored either extremely highly, and one, neutrally. In addition to this item, people in this cluster did not, in general, agree with items 1 ("Basically, the world is a just place"), 2 ("People who get lucky breaks have generally earned their good fortune"), and 10 ("People who meet with misfortune have often brought it on themselves"). The only statement with which they seemed to agree is item 5 ("It is rare for an innocent man to be wrongly sent to jail").

It is clear that people in this group have a general sense that the world is not a fair place – there is no guarantee that anyone will actually get what they deserve. In fact, people in this group seem to quite strongly believe that people might benefit from immoral or unjust actions, such as crime. At the same time, there does not seem to be sense that bad things will happen to people who don't deserve them – this group agreed that it is rare for an innocent

man to be sent to jail. As such people in this group seem to believe that while the world is not necessarily a fair place, neither is it unfair.

The final cluster for this variable, Cluster 1, clearly comprises people who are fairly low scorers. The range of mean item scores for this cluster is relatively small - 1.59 – 3.17. Five items score around the 1 score, and five around the 2. There is only one item that falls above 3, item 11 ("Crime doesn't pay"). This item marks a noticeable increase in score for this cluster, despite 3 being an indication of neutrality. In other words, people in this cluster clearly disagree with all the statements in the scale except for this particular one (and item 7, which was discussed for all clusters earlier). As such it would appear that they believe justice is unlikely to be done, and the world is not a place where each gets his due. The only area in which they are less certain about this belief is in relation to the benefits of crime. It seems that there might be some sense among this group that people involved in crime might, in fact, not benefit unfairly from their activities.

The final cluster analysis looked at the belief in an unjust world. As can be seen from the Cluster History Table (See Table 6.28) and the Dendrogram (See Figure 6.9), the first cluster splits into Clusters 2 and 3 at a height of 0.1438. Cluster 2 (n=305) then splits into Clusters 5 and 6 at a height of 0.0761. Cluster 5 (n=153) in turn splits into Clusters 11 and 8 at a height of 0.0317. Cluster 11 then splits into Clusters 19 and 49 at 0.0146. Cluster 19 (n=36) then splits into Clusters 66 and 43. Clusters 49, 66, and 43 split much lower down. Cluster 8 (n=101) splits into Clusters 15 and 16 at a height of 0.0183. Clusters 15 (n=56) and 16 (n=45) split into Clusters 20 and 40, and 30 and 31, much lower down. Cluster 6 (n=152), on the other hand, splits into Clusters 10 and 12 at a height of 0.242. Cluster 10 (n=114) then splits into Clusters 13 and 34 at 0.0167. Cluster 13 (n=91) then splits into Clusters 27 and 22

Table 6.26: Cluster Composition – Belief in a Just World (3-Cluster Solution)

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
1	185	JW2	2.78	1.18	1	5
		JW3	3.03	1.14	1	5
		JW6	2.82	1.07	1	5
		JW7	2.49	1.05	1	5
		JW9	2.69	1.13	1	5
		JW11	2.61	1.06	1	5
		JW12	2.99	1.01	1	5
		JW14	3.16	1.23	1	5
		JW15	2.79	1.17	1	5
		JW18	2.56	1.02	1	5
		JW19	3.58	1.28	1	5
2	170	JW2	2.97	1.07	1	5
		JW3	3.34	0.96	1	5
		JW6	3.64	0.83	1	5
		JW7	3.57	0.96	1	5
		JW9	3.10	1.02	1	5
		JW11	2.85	1.00	1	5
		JW12	2.74	0.83	1	4
		JW14	3.41	1.08	1	5
		JW15	3.38	1.00	1	5
		JW18	2.91	1.03	1	5
		JW19	4.52	0.71	1	5
3	110	JW2	3.38	1.17	1	5
		JW3	3.83	0.98	1	5
		JW6	4.02	0.89	2	
		JW7	4.12	0.86	2	5
		JW9	4.00	0.80	1	5
		JW11	4.01	0.68	2	
		JW12	2.74	1.14	1	5
		JW14	3.95	0.80	1	5
		JW15	4.33	0.62	3	
		JW18	3.25	1.15	1	5
		JW19	4.61	0.67	1	5

Figure 6.7: Belief in a Just World Mean Score Cluster Profile (3-Cluster Solution)

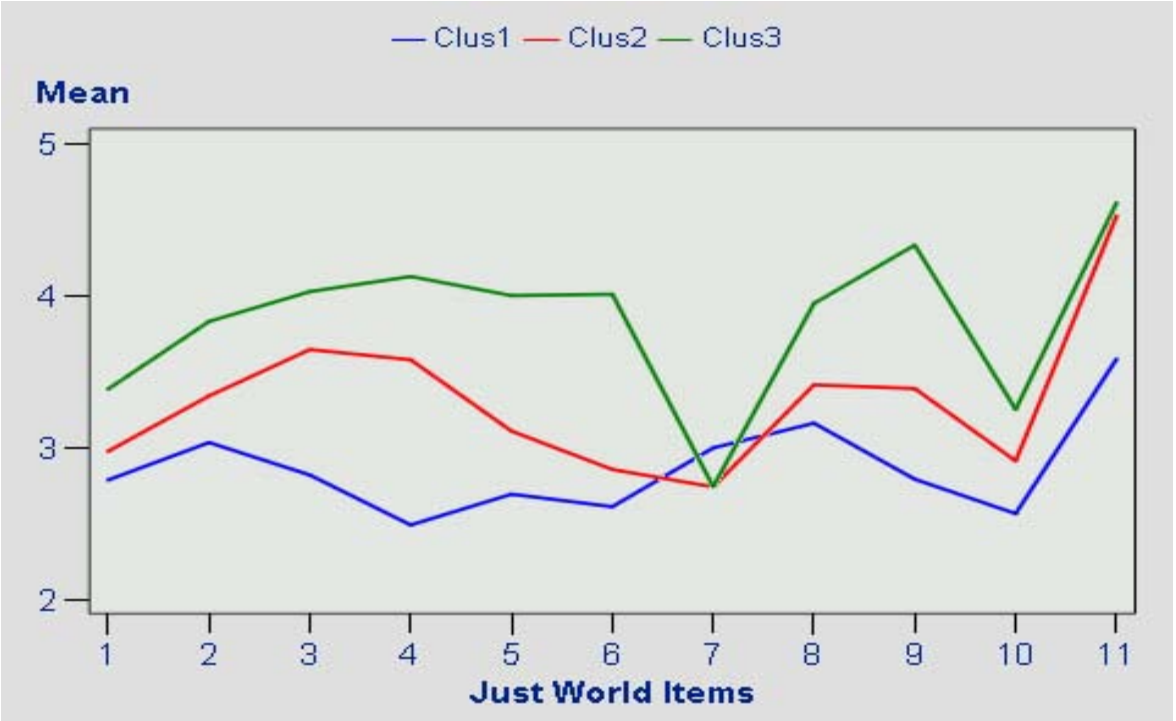


Table 6:27: Cluster Composition – Belief in a Just World (6-Cluster Solution)

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
1	29	JW2	2.20	1.11	1	5
		JW3	1.90	0.90	1	4
		JW6	2.48	1.09	1	5
		JW7	2.10	0.94	1	5
		JW9	2.03	0.94	1	4
		JW11	1.89	0.72	1	3
		JW12	2.96	1.09	1	5
		JW14	1.66	0.67	1	3
		JW15	1.59	0.63	1	3
		JW18	1.79	0.68	1	3
		JW19	3.17	1.44	1	5
2	97	JW2	3.13	0.96	1	5
		JW3	3.54	0.78	2	5
		JW6	3.59	0.69	1	5
		JW7	3.38	0.83	1	5
		JW9	3.19	0.99	1	5
		JW11	2.90	0.92	1	5
		JW12	2.84	0.80	1	4
		JW14	2.85	0.95	1	4
		JW15	3.69	0.66	2	5
		JW18	3.26	0.87	1	5
		JW19	4.49	0.60	3	5
3	110	JW2	3.38	1.17	1	5
		JW3	3.83	0.98	1	5
		JW6	4.02	0.89	2	5
		JW7	4.12	0.86	2	5
		JW9	4.00	0.80	1	5
		JW11	4.01	0.68	2	5
		JW12	2.74	1.14	1	5
		JW14	3.95	0.80	1	5
		JW15	4.33	0.62	3	5
		JW18	3.25	1.15	1	5
		JW19	4.61	0.67	1	5
4	140	JW2	2.96	1.14	1	5
		JW3	3.31	1.04	1	5
		JW6	2.85	1.04	1	5
		JW7	2.43	0.99	1	5
		JW9	2.68	1.05	1	5
		JW11	2.72	1.04	1	5
		JW12	2.99	0.99	1	5
		JW14	3.42	1.06	1	5
		JW15	2.96	1.07	1	5
		JW18	2.78	0.98	1	5
		JW19	3.94	0.96	1	5

Table 6:27: Cluster Composition – Belief in a Just World (6-Cluster Solution) Contd...

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
5	73	JW2	2.77	1.18	1	5
		JW3	3.07	1.11	1	5
		JW6	3.71	0.98	2	5
		JW7	3.83	1.07	1	5
		JW9	3.00	1.06	1	5
		JW11	2.79	1.10	1	5
		JW12	2.60	0.86	1	4
		JW14	4.15	0.75	2	5
		JW15	2.99	1.22	1	5
		JW18	2.44	1.06	1	5
		JW19	4.56	0.83	1	5
6	16	JW2	2.31	1.20	1	4
		JW3	2.61	0.88	1	4
		JW6	3.13	1.26	1	5
		JW7	3.68	0.95	2	5
		JW9	3.94	1.06	1	5
		JW11	2.90	1.32	1	5
		JW12	3.09	1.18	1	5
		JW14	3.56	1.41	1	5
		JW15	3.44	1.41	1	5
		JW18	2.06	1.00	1	4
		JW19	1.19	0.40	1	2

Figure 6.8: Belief in a Just World Mean Score Cluster Profile (6-Cluster Solution)

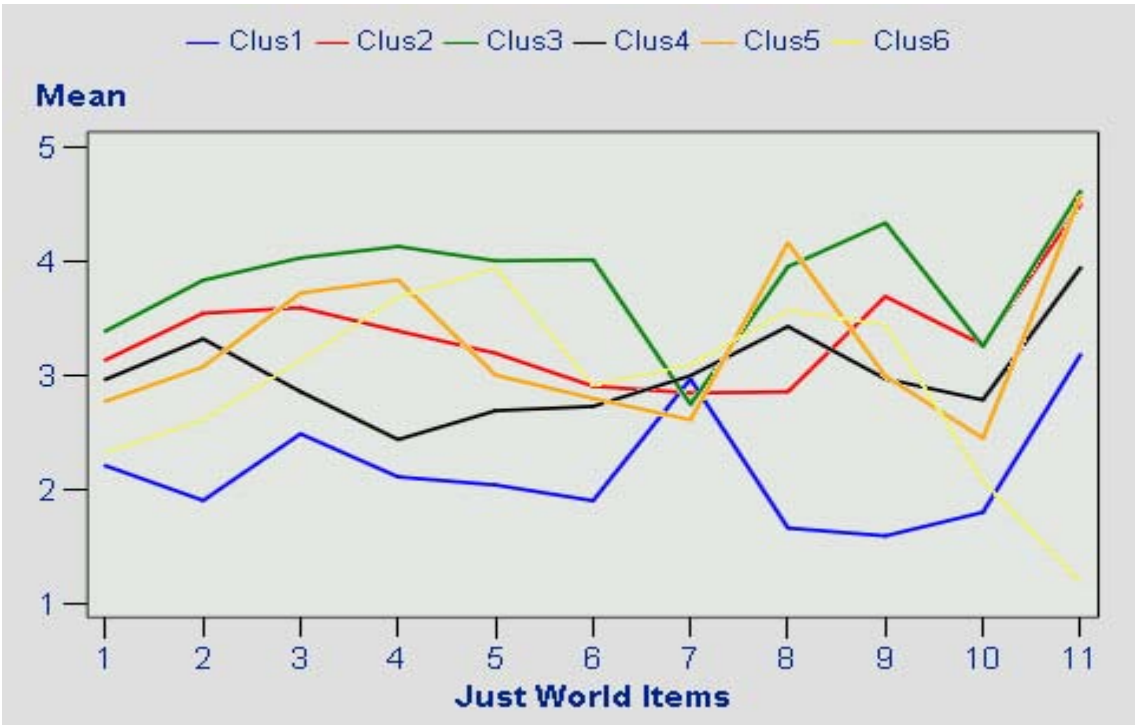
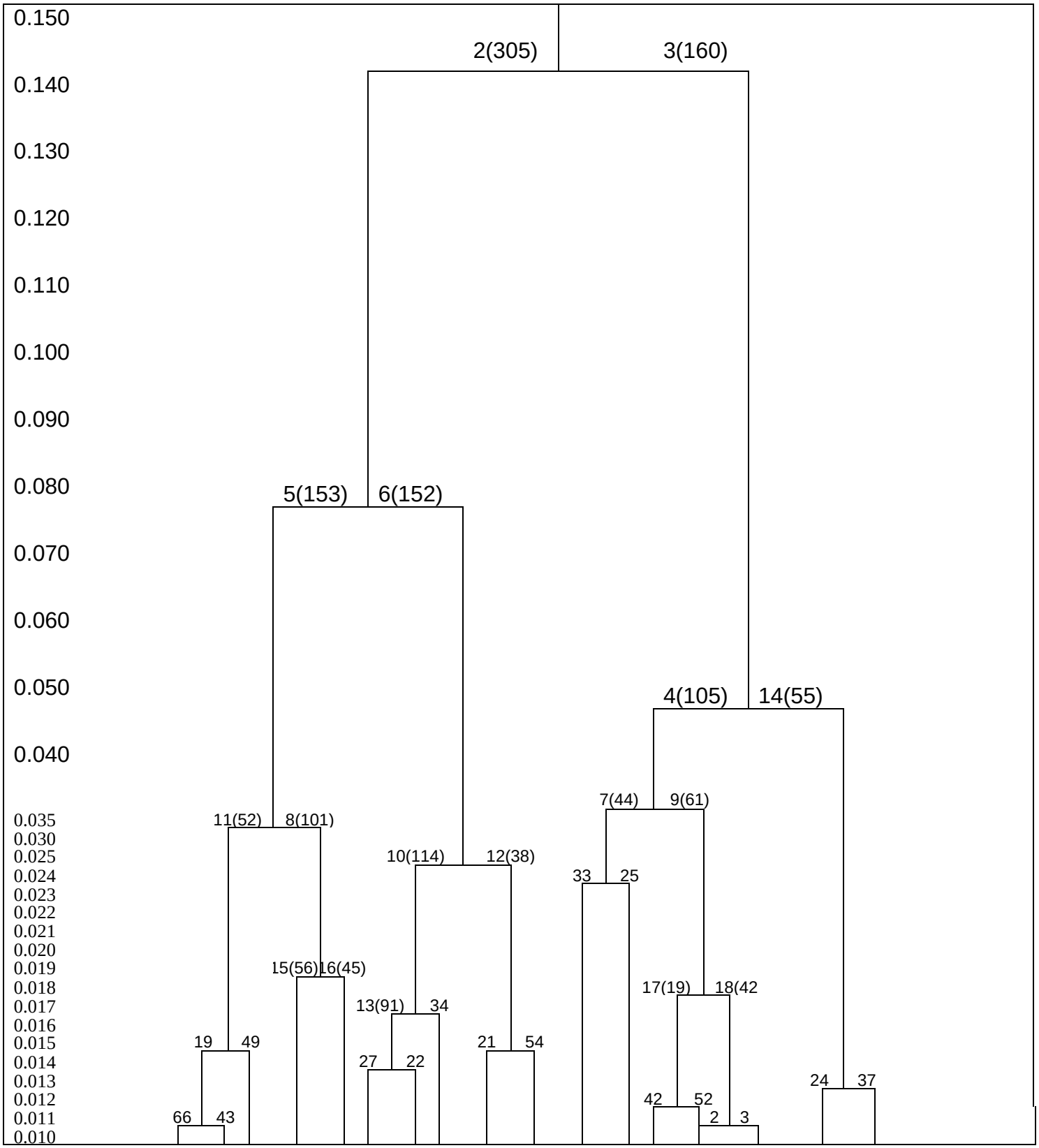


Table 6:28: Cluster Composition – Belief in an Unjust World (6-Cluster Solution)

NCL	Clusters Joined		FREQ	SPRSQ	RSQ	ERSQ	CCC	PSF	PST2	Tie
30	CL39	CL62	22	0.0058	.621	.591	6.69	24.6	6.6	
29	CL63	CL57	25	0.0062	.615	.586	6.40	24.9	9.3	
28	CL45	CL73	41	0.0067	.608	.581	6.03	25.1	9.5	
27	CL44	CL50	34	0.0071	.601	.575	5.64	25.4	9.1	
26	CL68	CL113	36	0.0076	.594	.570	5.17	25.7	20.1	
25	CL35	CL116	23	0.0077	.586	.564	4.74	26.0	7.4	
24	CL53	CL29	35	0.0077	.578	.558	4.36	26.3	8.2	
23	CL41	CL32	31	0.0078	.571	.552	4.02	26.7	7.8	
22	CL26	CL71	57	0.0084	.562	.545	3.62	27.1	15.5	
21	CL70	CL61	25	0.0085	.554	.538	3.25	27.5	10.6	
20	CL28	CL79	46	0.0089	.545	.531	2.88	28.0	10.1	
19	CL66	CL43	36	0.0103	.535	.524	2.30	28.5	13.2	
18	CL23	CL36	42	0.0103	.524	.516	1.80	29.0	8.2	
17	CL42	CL52	19	0.0118	.513	.507	1.09	29.4	9.0	
16	CL30	CL31	45	0.0118	.501	.498	0.48	30.0	10.8	
15	CL20	CL40	56	0.0120	.489	.489	-.05	30.7	11.6	
14	CL24	CL37	55	0.0136	.475	.479	-.75	31.4	13.3	
13	CL27	CL22	91	0.0141	.461	.468	-1.4	32.2	17.9	
12	CL21	CL54	38	0.0143	.447	.456	-1.9	33.2	14.0	
11	CL19	CL49	52	0.0146	.432	.443	-2.3	34.5	14.4	
10	CL13	CL34	114	0.0167	.415	.428	-2.8	35.9	17.7	
9	CL17	CL18	61	0.0178	.398	.409	-2.4	37.6	11.2	
8	CL15	CL16	101	0.0183	.379	.385	-1.1	39.9	14.3	
7	CL33	CL25	44	0.0232	.356	.357	-.11	42.2	17.1	
6	CL10	CL12	152	0.0242	.332	.325	1.36	45.6	20.9	
5	CL11	CL8	153	0.0317	.300	.288	2.41	49.3	22.8	
4	CL7	CL9	105	0.0359	.264	.244	3.98	55.2	19.2	
3	CL4	CL14	160	0.0444	.220	.191	5.78	65.1	23.7	
2	CL5	CL6	305	0.0761	.144	.112	7.65	77.8	52.4	
1	CL2	CL3	465	0.1438	.000	.000	0.00	.	77.8	

Figure 6.9: Dendrogram - Belief in an Unjust World



at a height of 0.0141. Clusters 34, 22, and 27 split much lower down. Cluster 12 (n=38) splits into Clusters 21 and 54 at 0.143. These two clusters then split much lower down.

Returning to the second main branch, Cluster 3 (n=160) splits into Clusters 4 and 14 at a height of 0.0444. Cluster 4 (n=105) then splits into Clusters 7 and 9 at 0.0359. Cluster 7 (n=44) splits into Clusters 33 and 25 at 0.0232. These two clusters then split much lower down. Cluster 9 (n=61), on the other hand, splits into Clusters 17 and 18 at a height of 0.0178. Cluster 17 (n=19) splits into Clusters 42 and 52 at a height of 0.0118, and Cluster 18 (n=42) splits into Clusters 23 and 36 at 0.0103. Clusters 42, 52, 23, and 36, split much lower down. Cluster 14 (n=55), on the other hand, splits into Clusters 24 and 37, both of which split much lower down.

Similar to the belief in a just world, two cluster solutions emerge as being potentially useful from observing the dendrogram. The first is a three cluster solution, eliminating all clusters after Clusters 3, 5, and 6, where the splits start happening much closer together. However another potential solution is to retain six clusters, namely Clusters 11,8,7,9,14, and 6. The cluster sizes at that level are still suitably large, and the splits are not yet too close together. A six-cluster solution may also be more appropriate for this study, in that it could offer more insight into the complexity of perceptions of justice.

As there are two possible solutions appropriate for this study, both were explored further. Starting with the three-cluster solution, the composition of each cluster is explored (See Table 6.29). Cluster 1 comprises 153 people, Cluster 2 152 people, and Cluster 3 160 people. The mean item scores for Cluster 1 range between 1.78 and 3.46, between 1.54 and 2.62 for Cluster 2, and between 2.64 and 3.96 for Cluster 3. The minimum scores in Cluster 1 are all 1, while the

maximum scores are predominantly 5, except for item 4, where the maximum score is 4. For Cluster 2, the minimum scores are also all 1, while all but three of the items have a maximum score of 5. Items 5, 13, and 17 have maximum scores of 4. In Cluster 3, the minimum score for all the items is 1, and the maximum score is 5.

From the line plot of the item mean scores (See Figure 6.10) it can be seen that while Cluster 2 appears to comprise lower scoring people, Clusters 1 and 2 comprise people who vacillate between moderate to higher scores for the items. There are some similarities and differences in the patterns of responses between clusters. Cluster 2 remains below a mean score of 2.5 for all of the items (except item 1(just world item 1) where there is a mean score of 2.623). Both Clusters 2 and 1 drop sharply from item 1 to item 2 (just world item 4) Cluster 1 to the lowest mean score for that cluster (1.78). Cluster 3, however, moves sharply up for this item, to the highest item mean score for this cluster (3.92). For item 3 (just world item 5), Clusters 2 and 3 both drop (Cluster 2 reaching the lowest mean score of 1.542 for that cluster), while Cluster 1 rises. For the first three items, Clusters 1 and 3 are virtually mirror images of one another. Both Clusters 2 and 1 rise up for item 4 (just world item 8), while Cluster 3 continues to drop slightly. Clusters 1 and 3 almost intersect at item 4, with the mean scores for that item being very similar in each cluster (2.88 and 2.81 respectively). For item 5 (just world item 10), both Clusters 2 and 1 drop slightly, while Cluster 3 moves up relatively sharply. All three clusters move down for item 6 (just world item 13), Cluster 3 relatively sharply. Clusters 1 and 2 move up again for item 7 (just world item 16), Cluster 1 quite sharply, moving above Cluster 3. Cluster 3 also moves up for item 7, but only slightly. Cluster 1 continues moving up for item 8 (just world item 17) , again staying above Cluster 3, which moves up very slightly. Cluster 2, on the other hand, drops slightly for this item. Both Clusters 1 and 3 drop for item 9 (just world item 20), Cluster 1 very sharply.

Cluster 2, however, increases slightly for this last item. It can be seen that between items 3 and 7, Clusters 1 and 2 share very similar profiles, and differ only in the magnitude of the profiles.

Moving onto the six-cluster solution, an analysis of the cluster composition (See Table 6.30) reveals that Cluster 1 comprises 52 people, Cluster 2 152 people, Cluster 3 101 people, Cluster 4 44 people, Cluster 5 61 people, and Cluster 6 55 people. The item mean scores for Cluster 1 range between 1.77 and 3.86, between 1.54 and 2.62 for Cluster 2, between 1.78 and 3.55 for Cluster 3, between 2.97 and 3.96 for Cluster 4, between 2.49 and 4.02 for Cluster 5, and between 1.93 and 4.25 for Cluster 6. There is no distinct pattern of high or low mean item scores for the clusters. Cluster 4 does appear to comprise mean scores of 3 and above, and thus at face value comprises people who are scoring slightly higher for the most part than in the other clusters. With regards to the maximum and minimum scores, the minimum score for items in Cluster 1 is mainly 1, with the exception of item 13 and 17, which have minimum scores of 3 and 2 respectively. The maximum score for the majority of items is 5, with the exception of items 4,8, and 20, where the maximum score is 4. The minimum score for all the items in Cluster 2 is 1, while the maximum score is predominantly 5, with the exception of items 5, 13, and 17, where the maximum score is 4. The minimum score for all the items in Cluster 3 is 1, while the maximum score is predominantly 5, with the exception of items 4 and 13, where the maximum score is relatively low at 3. For Cluster 4, the minimum scores are mixed between 1 and 2, while the maximum score for all the items is 5. Cluster 5 has two items with a minimum score of 2 (items 5 and 10), while the rest of the items have a minimum score of 1. All of the items have a maximum score of 5. Finally, the items in Cluster 6 have a minimum score of 1, except for items 1 and 4, which have a minimum score of 2 and 3 respectively. The

maximum scores are a combination of 4 and 5, except for item 20, which has a relatively low maximum score of 3.

When looking at the line plot for the mean item scores for the six-cluster solution (See Figure 6.11), it appears that the clusters have points of similarity, but also many points of difference. For item 1 and 2 (belief in a just world items 1 and 4), Clusters 1, 2, and 3 are almost identical, with their lines overlapping and moving sharply down. Clusters 4, 5, and 6 move up from item 1 to item 2, Cluster 6 very sharply. For item 3 (belief in a just world item 5), Clusters 1 and 3 change direction and move up, while Cluster 5 continues its movement upwards. Cluster 6 drops very sharply for that item, from a mean score of 4.25 to one of 1.94 for item 3. Clusters 2 and 4 also drop for this item. For item 4 (belief in a just world item 8) all the clusters appear to veer towards the midpoint. Clusters 1, 2, 3, and 6 all move upwards , while Clusters 4 and 5 both drop. Between items 4 and 6 (belief in a just world items 8, 10, and 13) there appears to be very little pattern within or between clusters. Clusters 6 and 3 both move very sharply down to item 6, and these two clusters overlap directly for this item and for the sharp increase to item 7 (belief in a just world item 16). At item 6 Cluster 1 moves above Cluster 4, but drops back down again for item 7. Clusters 6, 2, and 3 almost intersect at item 7, around a mean score of 3. All the clusters remain relatively level for item 8 (belief in a just world item 17), but Clusters 1,3, and 6 drop sharply for item 9 (belief in a just world item 20). Cluster 4 and Cluster 2 move slightly upwards for this item, while Cluster 5 drops slightly.

Similar to the belief in a just world solution, from looking at the cluster sizes and composition, it can be seen that the six-cluster solution perhaps offers a more complex and interesting result. With the three-cluster solution, the cluster sizes are relatively large, and the

clusters seem, for the most part, to be splitting into a lower scoring cluster, and two clusters of moderate scores (one with lower scores in the beginning and one with higher scores in the

Table 6.29: Cluster Composition – Belief in an Unjust World (3-Cluster Solution)

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
1	153	JW1	2.86	0.94	1	5
		JW4	1.78	0.60	1	4
		JW5	2.21	1.01	1	5
		JW8	2.88	0.97	1	5
		JW10	2.81	1.01	1	5
		JW13	2.55	1.13	1	5
		JW16	3.15	0.94	1	5
		JW17	3.46	0.85	1	5
		JW20	2.26	0.94	1	5
2	152	JW1	2.62	1.04	1	5
		JW4	1.92	0.77	1	5
		JW5	1.54	0.61	1	4
		JW8	2.45	1.03	1	5
		JW10	2.30	0.86	1	5
		JW13	1.75	0.64	1	4
		JW16	2.09	0.84	1	5
		JW17	1.96	0.71	1	4
		JW20	2.20	1.05	1	5
3	160	JW1	3.02	0.95	1	5
		JW4	3.92	0.91	1	5
		JW5	3.02	1.33	1	5
		JW8	2.81	1.06	1	5
		JW10	3.27	1.07	1	5
		JW13	2.73	1.12	1	5
		JW16	2.95	1.07	1	5
		JW17	3.03	1.09	1	5
		JW20	2.64	1.20	1	5

Figure 6.10: Belief in an Unjust World Mean Score Cluster Profile (3-Cluster Solution)

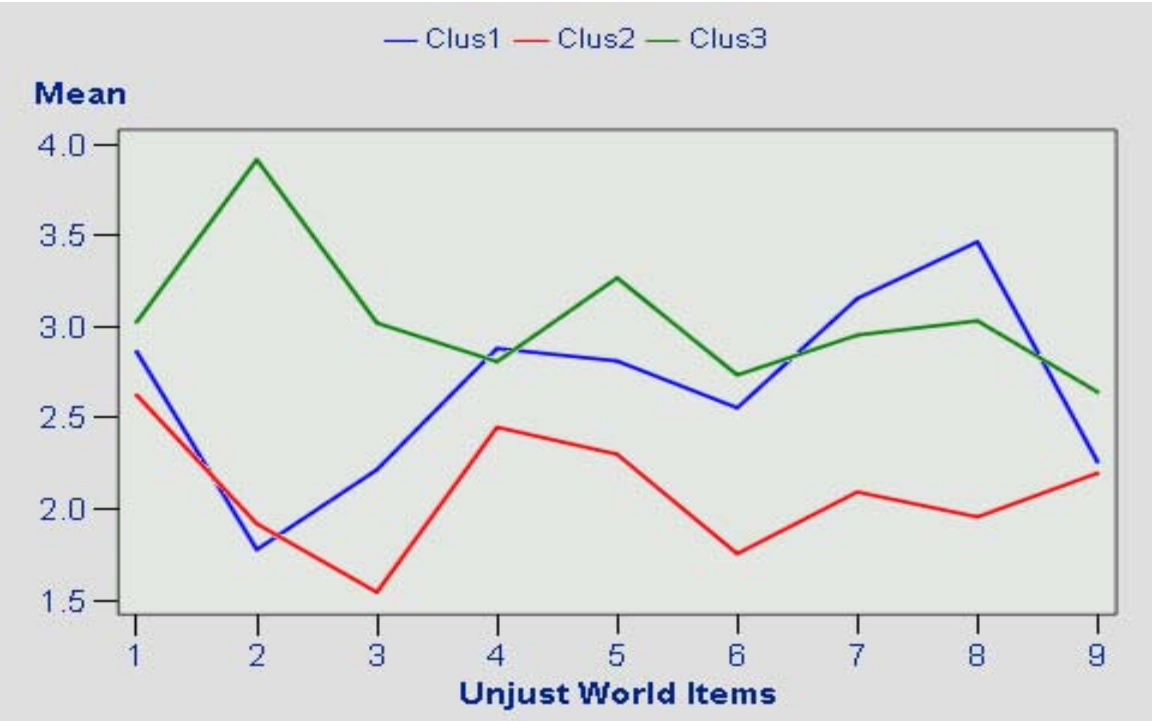


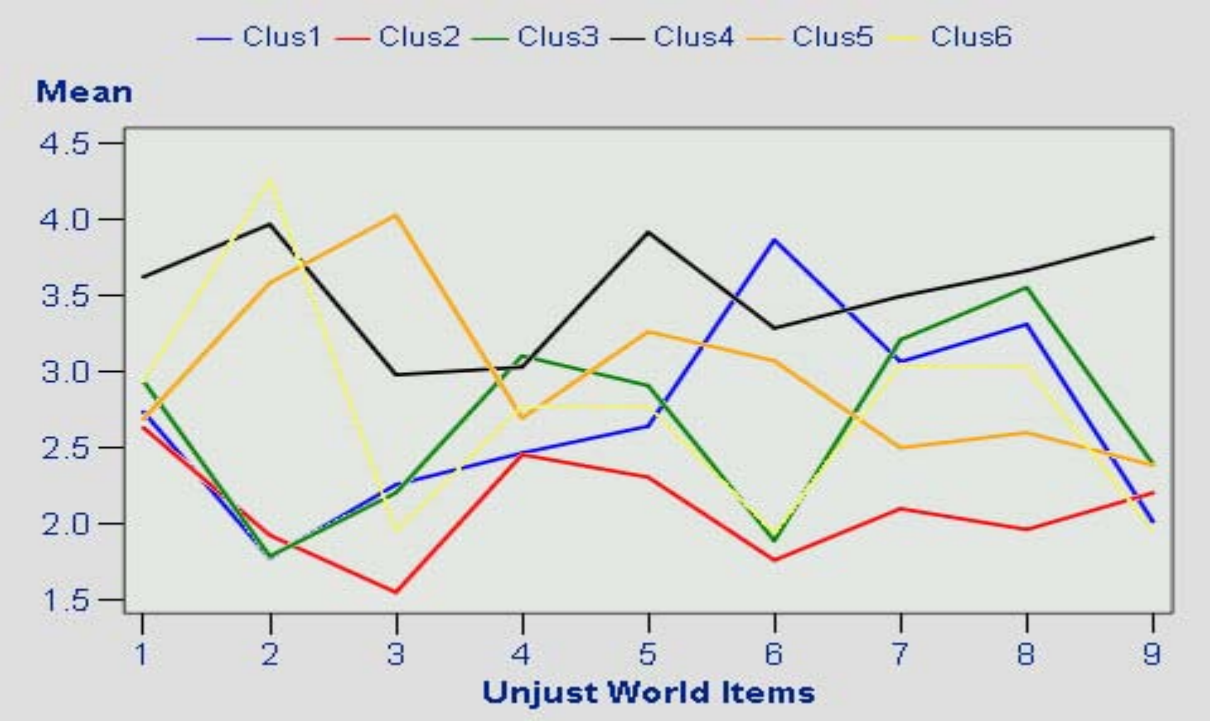
Table 6.30: Cluster Composition- Belief in an Unjust World (6-Factor Solution)

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
1	52	JW1	2.73	0.93	1	5
		JW4	1.77	0.70	1	4
		JW5	2.25	0.86	1	5
		JW8	2.46	0.83	1	4
		JW10	2.63	0.97	1	5
		JW13	3.88	0.71	3	5
		JW16	3.06	0.98	1	5
		JW17	3.30	0.81	2	5
		JW20	2.01	0.78	1	4.
2	152	JW1	2.62	1.04	1	5
		JW4	1.92	0.77	1	5
		JW5	1.54	0.61	1	4
		JW8	2.45	1.03	1	5
		JW10	2.30	0.86	1	5
		JW13	1.75	0.64	1	4
		JW16	2.09	0.84	1	5
		JW17	1.96	0.71	1	4
		JW20	2.20	1.05	1	5
3	101	JW1	2.93	0.94	1	5
		JW4	1.78	0.55	1	3
		JW5	2.20	1.09	1	5
		JW8	3.10	0.97	1	5
		JW10	2.90	1.02	1	5
		JW13	1.88	0.59	1	3
		JW16	3.20	0.93	1	5
		JW17	3.55	0.86	1	5
		JW20	2.39	0.10	1	5
4	44	JW1	3.62	0.90	1	5
		JW4	3.96	0.95	2	5
		JW5	2.97	1.31	1	5
		JW8	3.02	1.30	1	5
		JW10	3.91	0.74	2	5
		JW13	3.28	1.10	1	5
		JW16	3.49	1.01	1	5
		JW17	3.66	0.76	2	5
		JW20	3.87	0.94	2	5

Table 6.30: Cluster Composition- Belief in an Unjust World (6-Factor Solution) Cont…

Cluster	N Obs	Variable	Mean	Std Dev	Minimum	Maximum
5	61	JW1	2.68	0.89	1	5
		JW4	3.58	1.04	1	5
		JW5	4.02	0.84	2	5
		JW8	2.69	0.96	1	5
		JW10	3.26	1.06	2	5
		JW13	3.06	1.10	1	5
		JW16	2.49	1.01	1	5
		JW17	2.59	1.13	1	5
		JW20	2.38	1.13	1	5
6	55	JW1	2.93	0.84	2	5
		JW4	4.25	0.52	3	5
		JW5	1.95	0.85	1	4
		JW8	2.77	0.92	1	5
		JW10	2.76	1.05	1	5
		JW13	1.93	0.61	1	4
		JW16	3.04	0.96	1	4
		JW17	3.02	1.03	1	5
		JW20	1.95	0.56	1	3

Figure 6.11: Belief in an Unjust World Mean Score Cluster Profile (6-Cluster Solution)



beginning). While this could be a useful solution, as the aim of the research is to attempt to account for the complexity of justice perceptions, the six-cluster solution appears to be more appropriate. This solution has produced some interesting patterns, with some similarities and differences between clusters, but which is not simply about low, medium or high scores. As such, the six-cluster solution has been retained.

Looking at the cluster solution for belief in an unjust world, it is interesting to note that there seems to be a larger concentration of mean item scores below the neutral, midpoint score of three. This perhaps indicates that within the current sample, many people do not view the world as being unfair. This is somewhat reflected in the mean score of 23.32 for this scale. With a maximum score of 55 and a minimum score of 11, a mean score of 23.32 is somewhat lower than a midpoint of 27. As such there is tendency in this sample to disbelieve that unjust things can happen to an undeserving person. This can be more clearly seen when look at the distribution of scores for this scale in Figure 6.11.

Looking at the cluster patterning as a whole, it appears that there are two points of clear convergence/divergence. The first is in relation to item 1, where all of the clusters except Cluster 4 veer towards the neutral mid-point of three. Item 1 states " I've found that a person rarely deserves the reputation he has". One possible explanation for this convergence, particularly around the three (which indicates neither agree nor disagree), may be that the item is difficult to understand. The negative wording can be confusing, and the item may need repeated reading before the meaning becomes clear. The term 'reputation' may also be ambiguous, and it's meaning unclear to many of the respondents.

The second item for which there appears to be a clear pattern of convergence is that of item 9 ("Many people suffer through absolutely no fault of their own"). All of the clusters, except for Cluster 4, converge around a mean score of two for this item, indicating that there is general disagreement with this statement. This is rather surprising given the nature of the sample and the history of the country – this sample comprises many people who must have felt the unjust effects of Apartheid. Nonetheless, there appears to be a tendency to disbelieve that bad things happen to people who do not deserve them. There are a number of possible explanations for this. As mentioned earlier, this sample has a tendency to veer towards a disbelief in an unjust world. Item 9 is a rather general item, not referring to specific events or actions as many of the other items do (e.g. politics, crime, health). As such this item, and the low mean score for five of the clusters, can be considered an indicator of an overall belief (or in this case, disbelief) in an unjust world. This generalised belief that bad thing will not randomly happen to people may be rooted in the need for people living in post-apartheid South Africa to believe that the country is now run in a fair and just way – that the fight for democracy and a change in government has resulted in real changes to social justice in the country.

This final cluster analysis offers less insight into the structures of justice perceptions than the previous two analyses. This is perhaps because the majority of mean item scores fall between 2.5 and 3.5, indicating a sample that is largely undecided or neutral about the issues presented to them. There appear to be no extreme opinions in any of the clusters, with no mean item score falling below 1.5 and only one above 4. There are two clusters that appear to comprise higher scoring people (Cluster 4) and lower scoring people (Cluster 1), but even within these clusters the mean item scores do not indicate strong agreement or disagreement. One possible reason for this tendency to the neutral score of 3 is that all of these items are

negatively worded, and this might have caused some confusion or uncertainty about the meaning of the items. This problem would have been exacerbated by the translation of the items into Afrikaans and Zulu, as well as by the fact that South Africa has eleven official languages and some people might therefore not speak fluent English, Afrikaans, or Zulu. As such items such as “It is a common occurrence for guilty people to get off free in South African courts” or “I’ve found that a person rarely deserves the reputation he has” might be confusing to many people in this sample and may result in them electing to score themselves as undecided.

Another characteristic of this cluster solution that makes the results less valuable than the previous two is that often clusters are differentiated from one another by only one or two items, which tend to seem almost random. For example Clusters 6 and 3 are virtually identical, except for divergent views on item 2 (“Careful drivers are just as likely to get hurt in traffic accidents as careless ones”). This is an indication that there is not much differentiating the clusters from one another, and as such these groups are difficult to characterise. The exceptions to this are the two clusters that stand out as have low or high scorers and that can therefore be relatively easily characterised. - Cluster 4 comprises people who believe that the world can be an unfair place, while Cluster 2 comprises people who do not believe that the world is an unjust place. As will be seen in the following discussion, the remaining clusters are, however, more difficult to define.

As mentioned previously Clusters 6 and 3 are almost identical, comprising people who are largely neutral or unsure with regards to questions of unfairness in the world, but who do have a clear tendency to disbelieve that unfair things happen. The question related to driving is the one item that differentiates these two groups, with this being the only item that people

in Cluster 6 strongly agree with, and is one of two items that people in Cluster 3 clearly disagree with. While at the surface this may appear to be a rather strange and almost random item to be particularly concerned about, it may be better understood within the larger South African context. South African roads have notoriously high accident rates, with a particularly high death toll on the roads. These problems are exacerbated by a very poor public transport infrastructure which gave rise to a sprawling public taxi system that is difficult to regulate and which is a major contributor to road accidents and deaths. Road rage and aggressive driving is also on the increase. The strong feeling about this particular item for people in Cluster 6 may be an indicator that people in this cluster are frequent users of the roads either as vehicle owners or users of public transport and this is, therefore, one item that they are likely to have had direct and personal experience with and are therefore likely to feel strongly about. People in this group might also be more likely to have experienced an accident themselves. The remaining items are perhaps more removed for them, in that they refer to matters such as professional sports, criminal trials, and political candidates – issues that may be important or relevant, but which do not necessarily have the same affective content. This is further evidenced by the fact that this item is the only item for which none of the clusters scored a neutral score. People in each of the clusters either agreed or disagreed with the statement. Clearly this issue evokes a relatively strong response from people. The exact opposite explanation may be given for the low score on this item for Cluster 3 as was for the high score for Cluster 6 – that people in this cluster may not be drivers or frequent users of the road, or may have never had any personal experience with an accident, and as such would have no reason to imagine this statement to be true and in fact it might seem illogical.

People in Cluster 5 are also largely neutral or uncertain regarding the majority of items. The one item that has elicited a non-neutral response is item 3 “It is common occurrence for guilty people to get off free in South African courts”, which people in this group agreed with. What is important to note in trying to distinguish this cluster meaningfully from the others is that this is the only cluster that agreed with this item. People in Clusters 1, 2, 3, and 6 all disagreed with this statement, while people in Cluster 4 were neutral on this issue. As such this is the only group who believes that the South African legal system is failing. Once again this might be better understood contextually. South Africa has a very high crime rate, and crime related stories are given wide coverage in the media. It is a very high profile issue that is the cause of much debate and disagreement. Crime levels have been used as political platforms during elections, to explain the high rates of emigration, as well as a reason for the return of the death penalty. It is a controversial issue because simultaneous with the increase in crime is a new emphasis on the rights of all people, including people awaiting trial and prisoners, enshrined in the new South African constitution. There is a high profile public voice that is calling for harsher punishment for offenders, stricter regulation of the granting of bail, as well as more efficient conviction of criminals. People in this cluster may then share this sense that the system is not being effective in dealing with criminals and they are therefore getting away with their wrong doings. It is important to note that for the one related item “It is often impossible for people in South Africa to receive a fair trial” this group scored just over 2.5, indicating slight disagreement with this statement. Clearly they do not believe that people get unfair trials. As such they must have the sense that the courts are able to provide adequate trials, but that criminals still get off free. This perhaps indicates some sense among this group that this is not due to incompetence, but rather to some other set of motives.

The last cluster, Cluster 1, has a wider range of mean item scores and people in this cluster thus arguably held relatively extreme views. This is most noticeable in relation to item 6 ("Good deeds often go unnoticed and un-rewarded"), with which people in this cluster disagree, and items 2 ("Careful drivers are just as likely to get hurt in traffic accidents as careless ones") and 9 ("Many people suffer through no fault of their own"), with which they agree. Clearly there is a belief that misfortune happens to people quite randomly, unrelated to what they deserve or not, but positive efforts will be acknowledged and rewarded. People in this cluster seem to hold the view that people have agency in the good that happens to them, but possibly not in the bad.

The three clustering solutions discussed in this section were used as the dependent variables within three separate CHAID analyses. The results of these are discussed in the next section.

CHAID Analysis

Using the clusters described above as dependent variables, a CHAID analysis was conducted for each dimension of justice. Two tables are presented for each CHAID analysis - first a decision tree which displays the results of the analysis (as described in Chapter 5) is presented, and then a competing splits tree, which illustrates the demographic variables that were statistically close to the variable selected by the CHAID as a partitioning variable i.e. the demographic variables that competed with the selected variable, and that in the absence of that variable would have been selected as a partitioning variable.

Looking at the decision tree for organisational justice perceptions (See Figure 6.12) it can be seen that the first split is based on job title, with categories 3,5, and 11 (namely general workers, supervisors/foremen, and technical workers) splitting off into the first node, and categories

1,2,4,6,7,10 (administrative staff, laboratory staff, managerial staff, sales staff, security personnel, and human resources staff) into the second node. There are 222 people in the first node. Of those 222 people, 81 (36.5%) are in Cluster 6, 10 (4.5%) are in Cluster 5, 43 (19.4%) are in Cluster 4, 18 (8.1%) are in Cluster 3, 34 (15.3%) are in Cluster 2, and 36 (16.2%) are in Cluster 1. Thus the majority of people in this node are in Cluster 6, while the least number of people are in Cluster 5. There are also a relatively large number of these people in Cluster 4. There are 229 people in the second node, with 44 (19.2%) of these people falling into Cluster 6, 31 (13.5%) in Cluster 5, 19 (8.3%) in Cluster 4, 43 (18.8%) in Cluster 3, 74 (32.3%) in Cluster 2, and 18 (7.9%) in Cluster 1. As such, the majority of people in this node are falling into Cluster 2, with a relatively large number in Clusters 6 and 3. Clusters 1 and 4 have the least number of people falling into these job categories.

The first node of job title then splits on the basis of age, where people between the age of 20-40 fall into one node, and those between the age of 41-63 fall into the other. A total of 108 people fall into the 20-40 age group. Of this 108, 35 (32.4%) fall into Cluster 6, 0 (0.0%) fall into Cluster 5, 25 (23.1%) fall into Cluster 4, 11 (10.2%) into Cluster 3, 14 (13.0%) into Cluster 2, and 23 (21.3%) into Cluster 1. The majority of this node fall into Cluster 6, although a relatively large number also fall into Cluster 4. There are no people in this node from Cluster 5. In the next node, that of people between the age of 41-63, the largest number of such people (40.4%) are falling into Cluster 6. Only 10 (8.8%) are in Cluster 5, while there are 18 (15.8) in Cluster 4. The lowest number of such people, that of 7 (6.1%) are falling into Cluster 3. 20 (17.5%) are falling into Cluster 2, and 13 (11.4%) into Cluster 1.

Continuing with this leg of the tree, the 20-40 age node then splits on the basis of religion, where categories 2,3,5,6,8,11,13, and 14 (namely Muslim, Hindu, Protestants, Baptists, Methodists,

Zionist Christians, and New Apostolic Christians) fall into one node, and categories 4, 7, and 9 (Catholic, Anglican and Dutch Reform Christians) fall into the other. There are a total of 76 people of these religious persuasions in the first node. Of this 76, most (28 or 36.8%) fall into Cluster 6, none (0%) into Cluster 5, 8 (10.5%) into Cluster 4, 10 (13.2%) into Cluster 3, 8 (10.5%) into Cluster 2, and a relatively large number (22 or 28.9%) into Cluster 1. The second node with regards to religious persuasion comprises 32 people. The majority of these 32 people fall into Cluster 4 (17 or 53.1%), while 0 (0.0%) fall into Cluster 5, and 1 (3.1%) falls into Clusters 3 and 1 respectively. 7 (21.9%) fall into Cluster 6, and 6 (18.8%) fall into Cluster 2.

At the end of this first branch, the first node of religious persuasion then splits on the basis of length of tenure in the organisation. It splits into two nodes, that of people who have been in the organisation between 1 to 3 years, and those who have been in the organisation for 4 to 10 years. In the first node there are 35 people, of which 12 (34.3%) are in the sixth cluster, 0 (0.0%) are in Cluster 5, 2 95.7%) are in Cluster 4, 8 (22.9%) are in Cluster 3, 7 (20.0%) are in Cluster 2, and 6 (17.1%) are in Cluster 6. In the second node there are 41 people, of which 16 (39.0%) are in Clusters 6 and 1 respectively, 0 (0.0%) are in Cluster 5, 6 (14.6%) are in Cluster 4, 2 (4.9%) are in Cluster 3, and 1 (2.4%) is in Cluster 2. The second node of religious persuasion splits on the basis of investment. However the split is based on whether or not the respondent had a missing score in response to the question about investments, on the one hand, or whether they had unit trusts or stocks, on the other. As such this split is an artefact of the statistical procedure, rather than a meaningful split. While the node pertaining to people with missing values is not particularly useful, it is interesting to note that of the 18 people who fall into the node related to having stocks or unit trusts, the overwhelming majority of 15 (83.3%) fall into Cluster 3. The other 3 (16.7%) , and 0 (0.0%) fall into the other clusters.

Returning to the second node of the age split (people between the age of 41 and 63), the next split is on the basis of union membership. The first node comprises people who are members of the smaller unions functioning in the organisation (category 3), while the second node comprises people who are either members of COSATU or who are not union members at all. The first node comprises 41 people, almost half of whom (20 or 48.8%) fall into Cluster 6. 0 (0.0%) fall into Clusters 5 and 3, 9 (22.0%) fall into Cluster 4, 7 (17.1%) fall into Cluster 2, and 5 (12.2%) fall into Cluster 1. In the second node there are a total of 73 people, 26 (35.6%) of whom fall into Cluster 6, 10 (13.7%) fall into Cluster 5, 9 (13.7%) into Cluster 4, 7 (9.6%) into Cluster 3, 13 (17.8%) into Cluster 2, and 8 (11.0%) into Cluster 1.

The first union node, that of category 3, then splits on the basis of length of tenure in the respondents current position. The first node is people who have been in their current job for between 1 and 7 years, and the second node comprises respondents who have been in their current job for 8 to 9 years. The first node consists of a total of 35 people, the majority (20 or 57.1%) of whom fall into Cluster 6. 0 (0.0%) fall into Clusters 5 and 3, while 6 (17.1%) fall into Cluster 4, 4 (11.4%) into Cluster 2, and 5 (14.3%) into Cluster 1. The second node of job tenure comprises only 6 people, 3 (50.0%) of whom fall into Cluster 4 and 3 (50.0%) of whom fall into Cluster 2. The second union membership node (that of categories 2 and 3) splits on the basis of pension membership. The first node comprises people who are members of a pension scheme, and the second, people who are not. The first node has a total of 39 people, with the largest number (17 or 43.6%) falling into Cluster 6. 3 (7.7%) people fall into Cluster 5, 9 (23.1%) into Cluster 4, 1 (2.6%) person into Cluster 3, 5 (12.8%) into Cluster 2, and 4 (10.3%) into Cluster 1. The second node comprises 34 people, 9 (26.5%) of whom fall into Cluster 1, 7 (20.0%) into Cluster 2, 0 (0.0%) into Cluster 4, 6 (17.6%) into Cluster 3, 8 (23.5%) into Cluster 2, and 4 (11.8%) into Cluster 1.

Returning to the top of the tree, the second job title node splits on the basis of union membership, into non-members (1), or members (2 being SACWU members and 3 the other smaller unions operating in the organisation). There are a total of 150 people who are not union members in the first node. Of this 150 people, 25 (16.7%) fall into Cluster 6, 23 (15.3%) into Cluster 5, a very small number (5 or 3.3%) into Cluster 4, 35 (23.3%) into Cluster 3, the largest number of 59 (39.3%) into Cluster 2, and the least number of people (2 or 3%) fall into Cluster 1. There are a total of 79 people in the union membership node. Of that 79, the most number of people (19 or 24.1%) fall into Cluster 6, only 8 (10.1%) into Cluster 5, 14 (17.7%) into Cluster 4, again only 8 (10.1%) fall into Cluster 4, and 15 (19.0%) fall into Clusters 3 and 2 respectively. The first union node (that of non-members) then splits on the basis of number of people living in the same abode as the respondent. The first node in this split comprises people who live alone or share an abode with up to 5 people. The second node comprises people who share an abode with between 5 and 19 people. There are 133 people in this first node, a large number (54 or 40.6%) of which are falling into Cluster 2. 21 (15.8%) are falling into Cluster 6, 23 (17.3%) are falling into Cluster 5, 2 (1.5%) are falling into Cluster 4, 33 (24.8%) are falling into Cluster 3, and 0 (0.0%) are falling into Cluster 1. The second node comprises 17 people, 4 (23.5%) of which fall into Cluster 6, 0 (0.0%) fall into Cluster 5, 3 (17.6%) fall into Cluster 4, 2 (11.8%) fall into Cluster 3, 5 (29.4%) fall into Cluster 2, and 8 (17.6%) fall into Cluster 1.

The first node related to number of people sharing an abode then splits on the basis of religious persuasion. The first node comprises people who fall into categories 3, 5, 7, and 8 (Hindu, Protestant, Anglican and Methodist religions), and the second node comprises people who fall into categories 2,4,6,9,13, and 14 (Muslim, Catholic, Baptist, Dutch Reform, and New Apostolic religions). Node one comprises 71 people, 11 (14.7%) of whom fall into Cluster 6, 18 (24.0%)

into Cluster 5, 2 (2.7%) into Cluster 4, 9 (12.0%) into Cluster 3, the largest number, that of 35 (46.7%) into Cluster 2, and 0(0.0%) into Cluster 1. The second node comprises a total of 58 people, 10 (17.2%) of whom fall into Cluster 6, 5 (8.6%) into Cluster 5, 0 (0.0%) into Clusters 4 and 1 respectively, 24 (41.4%) into Cluster 3, and 19 (32.8%) into Cluster 2.

The second node related to number of people sharing an abode then splits on the basis of area, with node one comprising people who work in the Cape region, Krugersdorp, and Kwazulu-Natal Coastal region, and node two people who work in Durban. The first node comprises 12 people, none of whom are falling into Clusters 5, 3, and 1. 4 (33.3%) are falling into Cluster 6, 3 (25.0%) are falling into Cluster 4, and 5 (41.75) are falling into Cluster 2. The second node comprises only 5 people, 2 of whom are falling into Cluster 3, and 3 (6.0%) of whom are falling into Cluster 1.

Returning now to the second union membership node (that of members of SACWU and 3 the other smaller unions operating in the organisation), there is a split on the basis of religious persuasion. The first node comprises people in categories 4, 7, and 3 (Catholic, Anglican, and Hindu religions), and the second node people in categories 5,8,11,14 (Protestant, Methodist, Zionist Christian, and a category comprising people who are members of a range of minority religions such as Rastafarians and Buddhists). The first node comprises 35 people, 12 (34.3%) of whom fall into Cluster 6, 0 (0.0%) into Cluster 2, 6 (17.1%) into Cluster 4, 7 (20.0%) into Cluster 3, 4 (11.4%) into Cluster 2, and 6 (17.1%) into Cluster 1. The second comprises 44 people, 7 (15.9%) of whom fall into Cluster 6, 8 (18.2%) of whom fall into Clusters 5 and 4 respectively, 1 (2.3%) into Cluster 3, 11 (25.0%) into Cluster 2, and 9 (20.5%) into Cluster 1.

The first religious persuasion node splits on the basis of age, with first node comprising people between the age of 20-39, and the second node people between the age of 40-63. The first node comprises 19 people, 4 (21.1%) of whom fall into Cluster 6, 0 (0.0%) fall into Clusters 5 and 2 respectively, 6 (31.6%) into Clusters 4 and 1 respectively, and 3 (15.8%) into Cluster 3. The second node comprises 16 people, none of whom are falling into Clusters 5, 4, and 1. Half the people (8 or 50.0%) fall into Cluster 6, and 4 (2.5%) into Clusters 3 and 2 respectively. Finally, the second religious persuasion node splits on the basis of medical aid membership, the first node comprising people on a medical aid scheme, and the second people who are not on such a scheme. The first node comprises 32 people, none of whom are falling into Clusters 6 and 3. 8 (25.0%) fall into Cluster 5, 6 (18.8%) into Cluster 4, and 9 (28.1%) into Clusters 2 and 1 respectively. The second node comprises 12 people, 7 (58.3%) of whom fall into Cluster 6, none of whom fall into Clusters 5 and 1, 2 (16.7%) fall into Clusters 4 and 2 respectively, and 1 (8.3%) of whom falls into Cluster 3.

A closer look at these results highlights some important information about the impact of demographic variables on organisational justice perceptions. As mentioned in the previous paragraphs, the first split occurs on the basis of job title, with the first grouping comprise general factory workers, supervisors, as well as technical staff (for example plant electricians and engineers). The second grouping comprises all the other job categories, including administrative, laboratory, managerial, sales, security, financial, and human resources staff. The first grouping can thus be defined as comprising the staff who are engaged in the more hands on, factory floor work, while the second group comprise those who do more office type work.

Looking at the cluster divisions it can be seen that the majority of the first grouping fall into Cluster 6, while the majority of the second grouping fall into Cluster 2. This could be explained in light of the fact that people in Cluster 6 were characterised as being more dissatisfied with the collective relationship between management and employees than with practices that impact on individual well being in the organisation. It is employees such as the ones falling into this group for whom the collective industrial relationship has the most relevance. Everyone in this group except for 1 respondent belongs to a union, and as such their working conditions, wage increases, and benefits are negotiated for them by their representatives. It is unlikely that they would ever have cause to negotiate individually with their seniors, nor are they likely to be subject to individual processes such as performance management. Their dissatisfaction is thus more likely to be in the area with which they have the most experience rather than the areas that do not necessarily concern them directly. This group were also defined as having moderate/moderately low organisational justice perceptions. It is arguably unsurprising that such a group might have relatively lower justice perceptions than some other groups in that they are likely to be the lower earners in the organisation and to work in harsher conditions and have more monotonous jobs than other employees in the organisations.

On the other hand Cluster 2 was defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices. Once again this is perhaps unsurprising given that the types of jobs that these people do are likely to be relatively well paid with better working conditions than people in the first group. They are thus likely to experience the organisation as being personally fair, particularly in relation to other employees. Their concern for more general practices that affect the organisation as a

whole might be seen as part of their job function, particularly for managers, human resources personnel, and even financial staff.

Staying with this first grouping of 'hands on' employees, age was the next determinant of justice perceptions, with the grouping being split into 20 to 40 year olds, and an older group ranging from 41-63. The cluster memberships of these two groupings are slightly harder to interpret as the majority of people for both groups fall into Cluster 6 - those who are more satisfied with human resources practices, but less so with the industrial relationship in the organisation. This is consistent with the first split. Perhaps what is more enlightening is the clusters into which very few of these people fell. For the first group, that is hands-on employees below the age of 40, none fall into Cluster 5. People in Cluster 5 were characterised as being relatively satisfied with collective industrial relationship issues, but less so with the individual material benefits within the organisation. The fact that none of these younger hands-on employees fell into this cluster is an indication that the central concern for this group is the industrial relationship. Once again this makes sense given the nature of work they do, the extent to which they are unionised, as well as the fact that people in this age group are the ones who would have started work towards the end of Apartheid, and who would have thus been central to changes in the labour laws of the country, have felt the benefits that the power of unions and solidarity can bring, as well as have a stronger sense of their rights. They are also the grouping that will feel the effects of the quality of the industrial relationship for a lot longer than the older grouping.

With regards to the second grouping, that of older hands-on employees, very few (6%) fall into Cluster 3, which comprised people with high organisational justice perceptions who have a generalised positive attitude to the organisation, almost indiscriminately perceiving

everything to be just and fair. Once again this is unsurprising given that people in this group would have worked in this, or other organisations, right through the worst of the Apartheid years, where they would have been discriminated against to their financial and social detriment. It is unlikely that these older, less skilled workers would hold generalised high justice perceptions about the organisation.

Looking at the next level of splits, the younger hands-on employees are grouped on the basis of religion, with Catholics, Anglicans, and Dutch Reform religions being separated out from the rest of the religions. All three of these religions are Christian denominations, and all could be considered relatively conservative and prescriptive. Within this group a clear majority (53.1%) fall into Cluster 4, a cluster defined by a clear move into lower justice perceptions and comprises people who, while they are expressing neutrality regarding certain human resource practices, are generally feeling that the organisation treats employees unfairly. Such people were also particularly concerned with process-driven practices that have less observable procedural mechanisms. It is difficult to explain why these particular religious backgrounds might impact on organisational justice perceptions in this way, but this could possibly be accounted for by the fact that these religions are ritualistic and procedure driven, and people who are adherents of such practices might carry such expectations over into other spheres of their lives, such as the workplace. This group of people is already somewhat dissatisfied with organisational fairness given their jobs and their age, and their religious background might serve to focus their discontent onto more process driven facets.

The older hands-on employees were divided on the basis of union membership, with members of SEPPAWU falling into one category and non-members and SACWU members falling into the other. This split makes sense given that SEPPAWU is an affiliate of the Congress of

South African Trade Unions (COSATU), a union federation that is politically active and was central to the struggle against Apartheid. COSATU is closely aligned with the ruling African National Congress (ANC) party and is a relatively militant highly active body. The vast majority of South African unions are COSATU affiliates. SACWU on the other hand is not a COSATU affiliate, and caters to a more skilled workforce (within this group this is likely to be the technical staff). That they should be grouped with non-members who are traditionally more skilled employees is thus unsurprising. Once again the majority of both these groupings fall into Cluster 6, but significantly higher majority of the hands-on, older SEPPAWU members fall into this cluster (48.% vs. 35.6%). Further none of this group fall into Cluster 5 or into Cluster 3. Again this is unsurprising given the concern people in Cluster 6 have for the collective relationship, and the fact that these employees are particularly unlikely to hold generalised high justice perceptions. Members of a union like SEPPAWU are likely to be more militant and aware of problems in the collective relationship than those in more 'white collar' unions or non-members.

The final level of splits for the younger, hands –on employees is less meaningful. For the "conservative' religious grouping the next split was made on the basis of whether respondents had any financial investments, but the groupings are divided into those who do and don't have, and those who had missing data for that answer. As such that split is meaningless. For the other religious grouping the next split is made on the basis of organisational tenure, with one group comprising those who have been in the organisation for between 1 and 3 years and the other those who have been in the organisation between 4 and 10 years. While this split makes sense in that respondents who are relatively new to the organisation are in one group and those who have been there for longer are in another, the cluster affiliations are harder to interpret.

For the longer tenured people, the majority of people fall evenly into Clusters 1 and 6, but with proportionally more of people in this group falling into Cluster 1 than in the other group (39.0% vs. 17.1%). Once again this makes sense. Cluster 1 comprises the lowest scorers for almost every item, with people in this group being particularly concerned with their capacity to progress in the organisation. People in this cluster appear to have very little sense of hope with regards to moving out of their current positions, and have particularly low justice perceptions about direct and related practices that would potentially enable them to do so. This grouping have been in the organisation for relatively long periods yet they remain in more general or hands-on jobs, as such it is unsurprising that they would hold such perceptions.

With regards to the shorter tenured people, proportionally more of this group fall into Clusters 3 and 2 than do the longer tenured people. Cluster 3 comprised generalised high justice perception scorers, while people in Cluster 2 were defined as people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly. Both of these clusters comprise people who have higher justice perceptions than other groups. This is perhaps an indication that people who are newer to the organisation have less direct experience with organisational practices and therefore they have higher justice perceptions or more generalised concerns.

Moving onto the final split for the older, hands-on workers, those who are SEPPAWU members were split on the basis of job tenure, with those who have been in the same job for between 1 and 7 years falling into one group, and those who have been in the same job for 8 to 9 years falling into the other. The much wider range for the first group is a possible

indication that job tenure has more of an impact on justice perceptions when it reaches a relatively long period – it seems to reach some sort of critical point. At this point it appears some of the justice concerns shift. There are no longer-tenured people in Cluster 6, while 57.1% of the shorter tenured group fall into this cluster. Cluster 6 has had relatively high and consistent representation from this branch of the CHAID all the way through the tree, so this marks a departure from this trend. Instead 50% fall into Cluster 4 and 50% into Cluster 2. Cluster 4 comprises people who generally feel that the organisation treats employees unfairly but seem to be less concerned with the more visible, measurable organisational practices, and more concerned with process-driven practices that have less observable procedural mechanisms. Cluster 2, on the other hand, was defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly. Both these clusters have a concern for more general, unobservable practices in common. As such, people who occupy the more hands on jobs in the organisational, are older, members of a more militant union and have occupied the same job for a relatively long period of time are more inclined to have concerns about organisational processes rather than specific practices. This could be because this group would have seen a range of policies come and go, particularly post-Apartheid. They arguably would have a sense of these specific practices being temporal and subject to change quite quickly, whereas the underlying process issues are more consistent and pervasive.

With regards to the group comprising people who have been in their jobs a shorter period of time, the vast majority (57.1%) fall into Cluster 6. As mentioned previously this cluster was characterised as having moderate/moderately low organisational justice perceptions, with employees in this group being more dissatisfied with the collective relationship between management and employees than with practices that impact on individual well being in the

organisation. Once again it is unsurprising that this group of people have a propensity to fall into Cluster 6, particularly given their union affiliation. The fact that they have remained in the same job for a shorter period of time than people in the other group perhaps contributes to their emphasis on the industrial, collective relationship in the organisation. For this group the collective relationship is the one of the only ways that their work conditions and benefits will improve, including opportunities to move to other jobs. Their emphasis is thus likely to be on the collective relationship.

Finally, the non union and SACWU members are split on the basis of whether they are members of a pension or not, with the first grouping belonging to a pension and the second not. Pension membership as a predictor of justice perceptions makes sense in that this variable might be picking up on the extent to which employees feel cared for or looked after by the organisation. The organisation provides pensions for certain employees who meet particular contractual requirements. Not being on a pension thus may have implications for the interpersonal justice relationship between employees and the organisation. Having said that, the cluster affiliations for this variable are not particularly clear. Those who are not pension members seem spread relatively equally across clusters. Further to this they differ on cluster membership relative to the other group for almost every cluster. The most marked differentiation however is in relation to Cluster 4, where there are no non-pension members relative to 23.1% pension members. Cluster 4 marked a much clearer move into lower justice perceptions and comprises people who are generally feeling that the organisation treats employees unfairly. They are also more concerned with process-driven practices that have less observable procedural mechanisms. The fact that none of the non-pension people fell into this group might be an indication that their concerns are about specific human resource

practices such as the provision of a pension. It might also be an indication that at this level, people's concerns are for the more material benefits of organisational life.

Moving onto the second branch of the organisational justice CHAID diagram, it can be seen that the more office-based jobs were then split on the basis of union membership. Unlike for the first branch, this split is based on non-members versus members, with SACWU and SEPPAWU members forming one group. This is appropriate for this grouping of job types. This is because there are likely to be more non-members in this group as there is not a strong tradition of more highly skilled people in this country joining unions. Unions have historically catered to 'blue-collar' or semi-skilled employees. This group of people is also more likely to be characterised by a non-member/member split as it is likely to comprise more skilled workers and more highly educated workers. Further more people higher up in the organisational hierarchy, such as managers, are in this group, and they are seen to stand in opposition to the people that the unions represent.

When looking at the cluster affiliations for this variable, it can be seen that there are four noticeable differences between the two groups. There are significantly more non-union members than union members in Clusters 3 and 2, and significantly more union members in Clusters 4 and 1. This makes sense when looking at the cluster characterisations. Cluster 3 comprises generalised high justice perception scorers Cluster 2 was defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly. Both of these clusters comprise people who , for the most part, feel that the organisation is fair. People in Cluster 4, on the other hand, were characterised by a strong distributive concern, as well as dissatisfaction with the less observable aspects of organisational practices, while people in Cluster 1 were

characterised as having a general sense of injustice regarding most organisational practices with particular emphasis on those practices that allow people to progress and develop within the organisation, as well as the quality of the relationship between managers and employees, particularly with regards to the use of authority. As such it is unsurprising that non-union office based employees would have higher organisational justice perceptions. If they are happy with the work they are doing and the way in which the organisation treats them, they are unlikely to feel the need to join a union. On the other hand those who feel more disgruntled with the organisation and have lower justice perceptions would seek the protection and power of a union.

Office workers who are not union members were then divided on the basis of how many people live in the same abode as them, with 0 to 5 falling into one group and 6 to 19 into the other. This split seems sensible in that up to 6 people living together could constitute a regular size family, while larger than that might be an indication of people taking on financial responsibility for more than one family unit, or crowded living conditions implying some financial pressure. There are only 17 members of the second group, and the results have to be interpreted in light of this. Looking more closely at the cluster membership it can be seen that there are significant differences between every cluster between the two groups. The most marked however pertain to Clusters 5, 4, and 1. There are significantly more people in the first group falling into Cluster 5, with more of the second group falling into 4 and 1. These two clusters both comprise people with low organisational justice perceptions, with people in Cluster 4 having a strong distributive concern, and people in Cluster 1 being characterised as having a general sense of injustice regarding most organisational practices. Thus it is unsurprising that people who are living in arguably overcrowded conditions would have a strong distributive justice concern and would experience the organisation generally as

unfair. This might be exacerbated by the fact that they are working more closely with people who are not living under such financially constrained conditions as themselves. Ironically people living with fewer people had a higher membership in Cluster 5 than those living with a lot of people, with people in Cluster 5 being characterised as being relatively satisfied with collective industrial relationship issues, but less so with the individual material benefits within the organisation. This is particularly confusing given that this group also do not belong to a union.

Looking now at office workers who do belong to a union, the next split was on the basis of religion, with Catholics, Anglicans, and Hindus falling into the first group, and Methodists and Zionists falling into the second. This grouping is very difficult to interpret, and there is no clear reason why these religious groups would have clustered together. This cell thus has limited value. The same is true when looking at the final level of splits, where people sharing a house with fewer people were then divided on the basis of religion with Hindus, Anglican and Methodists falling into one group, and Muslims, Catholics, Dutch Reform, and Baptists into the other. In fact much of the last part of this branch is less valuable. Office workers who are not union members and who live with more than six people were divided on the basis of area, but the one group, that comprising people from Durban only had 5 members, making comparison less meaningful. Further, given that the religion nodes are difficult to interpret, it makes interpretation of the final splits for those group (that of age and medical aid) also meaningless.

When looking at the competing splits tree for organisational justice perceptions (See Figure 6.13) it can be seen that race, at 0.503, comes in very closely after job title at 0.514 for the first split. Ownership of a vacuum cleaner and area follow relatively closely, at 0.469 and

0.454 respectively. Ownership of a car is the final competing split, at a score of 0.386. For the first node of the second split, age is followed closely by level of education at 0.232 and union membership at 0.223. These are followed by marital status at 0.215, and membership of a pension scheme at 0.207. For the second node of the second split, union membership at a score of 0.672 is followed very closely by race at 0.637. Race is followed by salary at 0.610. There is then a relatively large gap, where ownership of a vacuum cleaner follows with a score of 0.462, and area comes after that with a score of 0.333.

At the next level of splits, religion was clearly the strongest criteria with a score of 0.620. Investments follow at somewhat of a distance, with a score of 0.352. Province and language tie at the next level, with a score of 0.307. Number of dependants is the last competing split for that node, with a score of 0.285. For the next node, union membership is followed relatively closely by level of education, with a score of 0.455. Ownership of a washing machine at 0.396 is followed very closely by religion at 0.395. Membership of a pension scheme is the last competing split for this node with a score of 0.386. For the next node, the number of people sharing an abode is the strongest criteria with a score of 0.569, with the next competing split, that of province, only having a score of 0.460. Area and religion follow province quite closely, with a score of 0.437 and 0.427 respectively. Looking at the final node at this level, religion is clearly the strongest criteria at 0.756, with the next split, age, having a score of 0.621. Membership of a religious discussion group follows with a score of 0.568, and type of abode is the fourth competing split for that node, with a score of 0.493.

At the next level, tenure is the strongest criteria with a score of 0.349, with type of employment contract following at 0.273. Province follows with a score of 0.244, and frequency of religious worship comes next with a score of 0.220. Property is the last

competing split for this node, with a score of 0.219. At the next node, investments, with a score of 1.312 is followed closely by marital status, with a score of 0.115. Number of dependants then follows with a score of 0.965, and age closely thereafter, with a score of 0.942. Length of tenure in current position is clearly the strongest criteria for the next node, with a score of 0.802. Number of people sharing an abode follows at a distance with a score of 0.668. That is followed by number of jobs in the last five years with a score of 0.554, and very closely after that is job title with a score of 0.534. For the next node, pension is the splitting criteria by a very short distance, with a score of 0.810 and education following with a score of 0.804. The next nearest split is membership of a religious youth group, with a score of 5.53, very closely followed by number of jobs in the last five years with a score of 0.525. At the fifth node on this level, religion with a score of 0.383 is closely followed by number of jobs in the last five years with a score of 0.317. This is followed by operation (i.e. the respondent or a dependent having needed an operation in the last year) at 0.317 and area at 0.297. Area is the splitting criteria for the next node with a score of 2.720. This is followed by age at 2.020, having Ds-TV at 1.996 and job title at 1.890. For the next node, age, with a score of 1.216 is followed by length of tenure in the organisation at 0.919. This is followed by property ownership at 0.758, home ownership at 0.740, and type of abode at 0.721. The final node is headed by medical aid at 0.939, but this is very closely followed by number of people sharing an abode at 0.902. Salary follows with a score of 0.809, ownership of a vacuum

Figure 6.12: CHAID Tree: Organisational Justice Perceptions

Figure 6.13: Competing Splits Tree - Organisational Justice Perceptions

cleaner at 0.703, and frequency of religious activity very closely after that with a score of 0.702.

The second CHAID analysis focussed on belief in a just world. Looking at the decision tree for Belief in a Just world (See Figure 6.14), it can be seen that the first split is on the basis of religious persuasion, with categories 6,7,9,11,13, and 14 (Baptists, Anglican, Dutch reform, Zionist Christian, New Apostolic, and minority religions) falling into the first node, and categories 2,3,4,5, and 8 (Muslim, Hindu, Catholic, Protestant, and Methodist religions) falling into the second node. In the first node there are a total of 268 people. 12 (4.5%) people fall into Cluster 6, 39 (14.6%) fall into Cluster 5, the largest number of 80 (29.9%) fall into Cluster 4, 67 (25.0%) fall into Cluster 3, 44 (16.4%) fall into Cluster 2, 26 (9.7%) fall into Cluster 1. The second node comprises 197 people. 4 92.0%) of which fall into Cluster 6, 34 (17.3%) fall into Cluster 5, 60 (30.5%) fall into Cluster 4, 43 (21.8%) fall into Cluster 3, 53 (26.9%) fall into Cluster 2, and 3 (1.5%) fall into Cluster 1.

The first religious preference node then splits on the basis of area (i.e. the area in which their place of work falls), with people working in the Cape region and the head office in Johannesburg (areas 1 and 2) falling into one node, and those working in Krugersdorp, Durban, and Kwazulu Natal coastal regions (areas 3, 4, and 5) falling into the second node. There are a total of 63 people in the first node, 4 (6.3%) of whom fall into Cluster 6, 6 (9.5%) into Cluster 5, 23 (36.5%), 14 (22.2%) into Cluster 3, 1 (1.6%) person into Cluster 2, and 15 (23.8%) into Cluster 1. Continuing with this leg of the tree, the first area node then splits on the basis of ‘Operation’ (i.e. whether the respondent or any of their dependants have required an operation in the past year), with the first node being people who have required operations, and the second node being those who have not. There are a total of 17

people in the first node, the majority of whom (11 or 64.7%) fall into Cluster 1. 1 (5.9%) person falls into Cluster 6, 3 (17.6%) into Cluster 5, 2 (11.8%) into Cluster 4, and none into Clusters 3 and 2. There are a total of 46 people in the second node, the largest number of whom fall into Cluster 4 (21 or 45.7%). 3 (6.5%) people fall into Clusters 6 and 5 respectively, 14 (30.4%) into Cluster 3, 1 (2.2%) person falls into Cluster 2, and 4 (8.7%) into Cluster 1.

The first 'operation' node then splits on the basis of union membership, with non-members falling into node 1, and SACWU members into node 2. Both nodes are relatively small, with there being a total of 13 people in the first node, and 4 in the second. In the first node the majority of the 13 people (10 or 76.9%) fall into Cluster 1, 1 (7.7%) person falls into Cluster 6, none fall into Clusters 5, 3, and 2 respectively, and 2 (15.4%) people fall into Cluster 4. In the second node, 3 (75.0%) of the 4 people fall into Cluster 5, 1 (25.0%) into Cluster 1, and none into Clusters 6, 4, 3, and 2. The second 'operation' node splits on the basis of religious persuasion, with categories 6 and 7 (Baptist and Anglican religions) falling into the first node, and categories 9, 13, and 14 (Dutch Reform, New Apostolic, and minority religions) falling into the second node. There are a total of 26 people in the first node, 18 (69.2%) of whom fall into Cluster 4, 7 (26.9%) into Cluster 3, 1 (3.8%) of whom falls into Cluster 5, and none of whom fall into Clusters 6, 2, and 1. There a total of 20 people in the second node, 3 (15.0%) of whom fall into Clusters 6 and 4 respectively, 2 (10%) into Cluster 5, 7 (35.0%), 1 (5.0%) into Cluster 2, and 4 (20.0%) into Cluster 1.

Returning to the second 'area' node, this splits on the basis of job title , with job categories 1,3,4,5,6,7,10, and 11 (administrative staff, general workers, managerial staff, supervisors, security personnel, sales staff, H.R. personnel, and technical staff) falling into node 1, and

job categories 2 and 14 (laboratory staff and accounting staff) into node 2. There are a total of 180 people in node 1, 8 (4.4%) of whom fall into Cluster 6, 28 (15.6%) into Cluster 5, 50 (27.8%) into Cluster 4, 45 (25.0%) into Cluster 3, 43 (23.9%) into Cluster 2, and 6 (3.3%) into Cluster 1. There are a total of 25 people in the second node, none of whom are falling into Clusters 6 and 2. 5 (20.0%) are falling into Cluster 5, 7 (38.0%) into Cluster 4, 8 (32.0%) into Cluster 3, and 5 (20.0%) into Cluster 1.

The first job title node then splits on the basis of those engaged in religious community outreach and those who are not. In the first node, those who are not involved in community outreach, there are a total of 155 people. 8 (5.2%) are in Cluster 6, 22 (14.2%) are in Cluster 5, 43 (27.7%) are in Cluster 4, 36 (23.2%) are in Cluster 3, 43 (27.7%) are in Cluster 2, and 3 (1.9%) are in Cluster 1. In the second node, those who are involved in religious community outreach, there are a total of 25 people. None of these people fall into Clusters 6 and 2, 6 (24.0%) fall into Cluster 5, 7 (28.0%) into Cluster 4, 9 (36.0%) into Cluster 3, and 3 (12.0%) into Cluster 1. The second job title node splits on the basis of number of people sharing an abode, with 0-8 people in the first node, and 9-19 in the second. There are a total of 22 people in the first node, none of whom fall into Clusters 6 and 2, 5 (22.7%) into Cluster 5, 7 (31.8%) into Cluster 4, 8 (36.4%) into Cluster 3, and 2 (9.1%) into Cluster 1. The second node comprises only 3 people, all of whom are in Cluster 1.

Returning to the first main split on the basis of religious persuasion, the second node of this split then splits on the basis of ownership of a fridge, with the first node being those people who do own a fridge, and the second node those who do not. There are 159 people in the first node, 3 (1.9%) of whom fall into Cluster 6, 22 (13.8%) into Cluster 5, 55 (34.6%) into Cluster 4, 35 (22.0%) into Cluster 3, 44 (27.7%) into Cluster 2, and none of whom fall into

Cluster 1. There are 38 people in the second node, 1 (2.6%) of whom fall into Cluster 6, 12 (31.6%) fall into Cluster 5, 5 (13.2%) into Cluster 4, 8 (21.1%) into Cluster 3, 9 (23.7%) into Cluster 2, and 3 (7.9%) into Cluster 1.

The first fridge ownership node then splits on the basis of job title, with job categories 1,2,3,4,5,6,7, and 11(administrative staff, laboratory staff, general workers, managerial staff, supervisors, security personnel, sales staff, and technical staff) falling into the first node, and job categories 10 and 14 (H.R. staff and financial staff) falling into node 2. There are a total of 142 people in the fist node, 2 91.45) of whom fall into Cluster 1, 22 (15.5%) into Cluster 5, 50 (35.2%) into Cluster 4, 35 (24.6%) into Cluster 3, 33 (23.2%) in Cluster 2, and none of whom fall into Cluster 1. The second node comprises 17 people, the majority of whom (11 or 64.7%) fall into Cluster 2. 1 (5.9%) person falls into Cluster 6, none fall into Cluster 5, 3, and 1respectively, and 5 (29.4%) fall into Cluster 4. The second fridge ownership node splits on the basis of the number of jobs the respondent has had in the past 5 years, with 1-2 jobs falling into the first node, and 3-6 jobs into the second node. There are a total of 23 people in the first node, none of whom fall into Cluster 6, 9 939.1%) into Cluster 5, 4 (17.%) into Cluster 4, 5 (21.7%) into Cluster 3, 2 (8.7%) into Cluster 2, and 3 (13.0%) into Cluster 1. The second node comprises 15 people, 1(6.7%) of whom falls into Clusters 6 and 4 respectively, 3 (20.0%) into Clusters 5 and 3 respectively, 7 (46.7%) into Cluster 2, and none of whom fall into Cluster 1.

The first job title node then splits on the basis of area, with areas 1,3,4,and 5 (Cape region, Krugersdorp, Durban, and Kwazulu Natal coastal) falling into the first node, and area 2 (Head Office in Johannesburg) falling into the second node. There are a total of 125 people in this first node, with only 2 (1.6%) falling into Cluster 6, 20 (16%) into Cluster 5, 38

(30.4%) into Cluster 4, 35 (28.0%) into Cluster 3, 30 (24.0%) into Cluster 2, and none of whom fall into Cluster 1. The second area node comprises 17 people, the majority of which (12 or 70.06%) fall into Cluster 4, 2 (11.8%) of whom fall into Cluster 5, 3 (17.6%) into Cluster 2, and none of whom fall into Clusters 6, 3, and 1 respectively. The second job title node then splits on the basis of length of tenure in the organisation, with 1-3 years falling into the first node, and 4-10 years falling into the second node. These nodes are relatively small, with a total of 4 people in the first node and 13 in the second. In the first node, 1 (25.0%)of the 3 people falls into Cluster 6, while the remaining 3 (75.0%) fall into Cluster 4. In the second node, 11 (84.6%) of the 13 people fall into Cluster 2, while the remaining 2 (15.4%) people fall into Cluster 4.

The first 'number of jobs in the last 5 years' node then splits on the basis of chronic medication (i.e. whether the respondent or any of his/her dependants have required chronic medication over the past year), with the response 'no' falling into the first node, and 'yes' into the second. There are a total of 20 people in the first node, none of whom fall into Cluster 6, 9 (45.0%) of whom fall into Cluster 2, 1 (5.0%) into Cluster 4, 5 (25.0%) into Cluster 3, 2 (10.0%) into Cluster 2, and 3 (15.0%) into Cluster 1. There are only 3 people in the second node, all of whom fall into Cluster 4. The second 'number of jobs in the last 5 years' node splits on the basis of property ownership, with property owners falling into node 1 and non-owners into node 2. There are only 5 people in the first node, 3 (60.0%) of whom fall into Cluster 3, and 1(20.0%) of whom falls into Clusters 4 and 2 respectively. There are 10 people in the second node, 6 (60.0%) of whom are in Cluster 2, 3 (30.0%) in Cluster 5, and 1 910.0%) in Cluster 6.

Looking more closely at the belief in a just world, as was mentioned previously the first split was made on the basis of religion, meaning that of all the demographic variables included in the analysis, religious affiliation was the best determinant of social justice perceptions. This is unsurprising in that religions are aimed at providing a basis for judging what constitutes moral behaviour, and therefore are used to facilitate followers in judging right or wrong action. Religion affiliation is, therefore, likely to impact on social justice perceptions as different religions advocate different kinds of morality. This can be seen more clearly when looking at the different groupings. The first group comprised Baptists, Anglicans, Dutch Reform Christians, Zionist Christians, as well as New Apostolic Christians, while the second group comprised Muslims, Hindus, and Catholics. Clearly Muslims, Hindus, Catholics and Methodists were separated out from the different denominations of the Protestant church. At a broad level the religions in this second grouping could perhaps be considered to be doctrinal in nature in that they are based on a corpus of texts that are prescriptive – the texts prescribe what one should believe and how. The Second group of religions, on the other hand, arguably tend towards evangelical individualism – they emphasise an individuals emotional relationship with God and prize individual conviction and emotion above prescriptive doctrine. While Methodism is a Protestant religion it is one of the earliest forms of Protestantism, and is very structured. It arguably has more in common with Catholicism than the other Protestant religions.

Looking at the cluster affiliation it can be seen that there are 3 clusters for which there are markedly different membership proportions, namely Clusters 1, 2, and 6. The Protestant religion groupings have a higher proportion of members in Clusters 1 and 6, and a lower proportion in Cluster 2 when compared with the more doctrine based religions. Cluster 2 comprises people whose beliefs about justice are based on a clear work ethic – those

individuals who work hard will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. On the other hand, Cluster 1 comprises people who are, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. Similarly people in Cluster 6 have a general sense that there is no guarantee that anyone will actually get what they deserve, and believe that people might benefit from immoral or unjust actions, such as crime.

Clearly people in the Protestant religion groups have a stronger sense of the world as an unjust place than those in the doctrine based group who tend towards a belief that effort will yield results. This could possibly be explained by the more prescriptive nature of the doctrine based religions which strongly entrenches the notion that moral and religious behaviour will be rewarded, both on earth and in the afterlife. While the Protestant religions would also express this belief they would be less prescriptive in interpreting what such behaviour was. As such there might be more flexibility that leads to a less definite sense of the relationship between effort and reward. Further, given that these religions have a more open and flexible base would allow for followers to question the ambiguity that exists in the world and recognise injustice. As such they could possibly be more likely to see the world as unjust.

The Protestant based religions then split on the basis of the area in which people live, with people living in the Cape and Gauteng falling into one branch and those living in Durban, Durban coastal, and Krugersdorp falling into the other. This grouping appears to divide areas into the two major provinces in South Africa (Gauteng and the Cape) and three smaller areas (Durban, Durban coastal, and Krugersdorp). Looking at the cluster affiliation it can be

seen that there are two notable differences between the groups, namely in relation to Clusters 2 and 1. The larger provinces group has proportionally more people in Cluster 1 than the smaller areas, who in turn have proportionally more members in Cluster 2. Cluster 2 comprises people whose beliefs about justice are based on a clear work ethic – those individuals who work hard will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. On the other hand, Cluster 1 comprises people who are, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. People living in the larger provinces thus have lower social justice perceptions than those living in the smaller area. This is possibly unsurprising given that the larger provinces are prone to more social problems such as crime, overcrowding, and unemployment. On the other hand the smaller areas possibly facilitate more of a 'small town' mentality which promotes the idea of hard work and reward, and in which people are exposed to fewer of the problems of large city living.

Looking at the next level of splits, the Cape and Gauteng group then split on the basis of whether or not they or any of their dependants have required an operation in the last two years. This seems like an unlikely determinant of justice perceptions in that this question was included as part of a series of questions exploring health and financial status. On its own it might seem rather arbitrary. Despite this it is indicating some clear cluster affiliations. Possibly this variable has emerged as important in that it signifies a possibly traumatic event or an event which could call into question perceptions of justice. There are 3 marked differences in cluster affiliation for this group, in relation to Clusters 1, 3, and 4, with their being significantly more people who have had an operation in Cluster 1, and significantly more who haven't in Clusters 4 and 3. Cluster 3 comprises the highest scoring people for

most of the items in this scale and comprises people who believe that justice will, for the most part, be done, both at a personal and a broader social level. People in Cluster 4 did not have faith in the belief that one's own hard work will be paid off but did have a slightly stronger belief that broader social systems will, in the long run, be fair. On the other hand, Cluster 1 clearly comprises people who are, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. It seems likely that people who have experienced something as negative as an operation (along with all the complications related to engaging with the health system in this country) might be more prone to negative justice beliefs. Obviously the reverse cannot necessarily be said to be true, in that the absence of an operation wouldn't prompt feelings of justice. However it might mean that people in this group have not had their justice perceptions challenged in the same way as people in the other group have.

People living in the smaller areas of South Africa were then split on the basis of job title, with laboratory and financial staff being separated out from all the other job titles. As mentioned previously job title is representative of a range of variables in a person's life, not all of which are confined to work life. As such it is unsurprising that it is such a relatively strong determinant of social justice perceptions. It is, however, more difficult to interpret the nature of the groupings. One possible explanation could be that both financial and laboratory staff, the latter comprising jobs such as technicians, research chemists, and colour technicians, are likely to be particularly strong mathematically and might have an orientation to more logical, procedural, and structural thinking. The other jobs, however, may require more of a mix between logic and creativity.

The most notable differences in cluster membership for this split relate to Clusters 1 and 2, with more financial and laboratory staff falling into Cluster 1 and fewer into Cluster 2. Cluster 1 comprises people who are, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. People in Cluster 2, on the other hand, have a stronger belief that those individuals who work hard, be it at school or at work, will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit.

The final level of splits are not all interpretable given the sizes of some of the groups. For example the group of people who had operations split on the basis of union membership, but the two groups comprise 13 and 4 people respectively. Similarly financial and laboratory employees split on the basis of the number of people with whom they share an abode, but the groupings comprise 22 and 3 people respectively. These grouping sizes make any conclusions limited in value. Further, the non-operation group was split on the basis of religious affiliation, with one group comprising Baptists and Anglicans, and the other Dutch reform and New Apostolic members. While there may be some significance for this split, the meaning is not apparent. There does not seem to be any obvious reasons for this type of grouping, making any interpretation difficult.

One final split that does warrant mention is that of the first grouping of job title, namely not laboratory or financial staff, splitting on the basis of their involvement in community outreach as part of their religious activities. The groupings were made on the basis of those who were involved in community outreach and those who were not. Such a split makes sense particularly in light of the fact that religious affiliation was the first determinant of social justice perceptions. The community outreach variable possibly points to the degree to

which people are engaged with their religion of choice or the extent of their religiosity, adding more depth to simple religious affiliation. The most marked difference relates to the membership of Cluster 2, where 27.7% of people who are not involved in religious community work belong to this cluster as opposed to none from the other group. Cluster 2 comprises people who believe that those individuals who work hard, be it at school or at work, will derive the benefits they deserve and those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. To some extent this affiliation makes sense. If people believe that if you work hard you will reap the benefits, they might be less sympathetic to people who have fallen on hard times, possibly believing that they have not worked hard enough. As such they would be less likely to engage in community work aimed at helping those less fortunate.

Moving onto the second main branch of the social justice decision tree, it can be seen that the more doctrine based religions split on the basis of whether or not the respondent owned a refrigerator. Like the question pertaining to whether or not people have had an operation, this seems like an unlikely predictor on its own. Again this question was asked as part of a series of questions aimed at exploring financial status, yet out of all of these questions (including those related to salary, number of financial dependants, or ownership of one's house) owning a refrigerator emerged as the strongest predictor of social justice perceptions. This could possibly be explained by looking at what types of people are likely to own a refrigerator - they would have to have enough money to buy a fridge, live somewhere that had electricity, they would have enough money to buy food for relatively longer periods of time, and would not live a nomadic type of existence. While people who do not own a refrigerator do not necessarily fit the opposite description, it must be noted that a fridge is one of the first basic

items that people acquire when setting up a home. A refrigerator can thus be seen as indicative of a particular type of lifestyle that extends beyond just pure financial matters.

There are three noticeable differences between the two groups in relation to cluster affiliation. There are more members of Cluster 4 among people who do own a fridge than those who don't, and more members of Clusters 5 and 1 among those who don't own a fridge than those who do. People in Cluster 4 put less faith in the belief that one's own hard work will be paid off but did have a slightly stronger belief that broader social systems will, in the long run, be fair. For people living in relatively stable conditions such as those described above, the broader social system is, to some extent, working. They would be more likely to believe that it is fair than those living more unstable lives. On the other hand, Cluster 1 clearly comprises people who are, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. Again it seems unsurprising that people who do not own refrigerators might tend slightly more to a belief in broader social injustice. Despite this, people in Cluster 5 do not believe that people always deserve their misfortune but seem to feel more strongly about people deserving their own good fortune. It might seem contradictory that people who are not living with even the most basic of household appliances, particularly one so closely linked to a certain quality of life, have a stronger belief that people deserve their own good fortune, in that there would be an implication that they have not earned a better quality of life. However this belief is coupled with a belief that people do not deserve their own misfortune, which would presumably apply to themselves.

People who do own a refrigerator were then split on the basis of job title, with Human resources and financial jobs falling into one grouping and all other job titles into the other.

The human resources and financial functions in organisations are usually closely linked in that the employees and their performance are essential to the healthy financial functioning of the organisation. Human resources is often seen as one of the mechanisms used to keep pay roll costs contained as well as to keep such costs relative to performance. Both such types of jobs will take a keen interest in employee performance (albeit sometimes for very different reasons). This is not, therefore, an unlikely grouping. Looking at the cluster affiliations it can be seen that significantly more of this group belong to Cluster 2 than of the other group. In fact the majority of people in this group (64.7%) belong to Cluster 2. People in Cluster 2 hold beliefs about justice that are based on a clear work ethic – those individuals who work hard will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. This is congruent with the nature of these two particular jobs, were what a person does and how well they do it has directly visible results in the form of salary and other benefits including status. There is some indication that this particular focus on exchange relationships at work is also apparent in their ideas about social justice at a broader level.

People who do not own a refrigerator were then split on the basis of the number of jobs respondents have had in the last five years. This question is representative of the extent of stability in one's work life, and in turn, to some extent, in one's social life. This is arguably particularly true within the South African context where there are many industries that make use of casual or seasonal labour, and where the practices of smaller employers is not monitored resulting in high turnover of staff. As such there is a relatively large contingent of unskilled workers who change jobs frequently, often not out of their own volition. Given that the previous split was also an indicator of domestic stability, it makes sense that one should follow the other and interact in this way. The two groups were divided into those who had one

or two jobs, a fairly stable history, and those who had between 3 and 6, a more unstable record. When looking at the cluster affiliations, two differences are apparent – there are more of the people with a stable work history in Cluster 5 than those with a more unstable history, and there are more of the unstable group in Cluster 2 than of the stable group. People in Cluster 2 hold beliefs about justice that are based on a clear work ethic – those individuals who work hard will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. This affiliation is quite difficult to explain, as intuitively one would imagine that this group of people would be more cynical and likely to believe that hard work is not rewarded. However, despite having a relatively unstable work history, they do persist in finding employment. This is arguably indicative of a determination to earn any benefits rather than, for example, taking them through welfare or becoming financially dependent on other family.

The final level of this branch is limited in its value due to the cluster sizes, which make comparison meaningless.

Looking at the competing splits for belief in a just world (See Figure 6.15) it can be seen area, with a score of 0.18, came in very closely behind religion, which has a score of 0.189 that for the first split. This is closely followed by job title with a score of 0.179, race with a score of 0.171, and ownership of M-Net with a score of 0.136. For the first split at the next level, area came in first with a score of 0.468. This is followed by province with a score of 0.397, operation with a score of 0.378, job title considerably further down with a score of 0.291, and finally salary with a score of 0.288. For the second split, ownership of a fridge, with a score of 0.317 comes in first, but is followed relatively closely by age with a score of

0.287. Age is narrowly followed by job title with a score of 0.266, marital status with a score of 0.260, and finally race, with a score of 0.255.

For the first node at the next level, an operation in the last year came in first by a very strong lead, with a score of 1.482. Age follows with a score of 0.909, requiring hospitalisation next with a score of 0.883, then number of people sharing an abode with a score of 0.783, and finally religion with a score of 0.741. For the second split at this level, job title comes in first by a narrow margin with a score of 0.369. Province follows with a score of 0.352. Length of tenure in the organisation is next with a score of 0.323, then length of tenure in current job with a score of 0.316. Finally involvement in religious community outreach follows with a score of 0.292. Job title comes in relatively strongly for the third split at this level, with a score of 0.358. This is followed by area with a score of 0.247, and then race with a score of 0.238. Ownership of Ds-TV then follows with a score of 0.229, and finally frequency of religious activity, with a relatively low score of 0.192. The final split at this level is headed by number of jobs in the past five years with a score of 1.771. Age then follows with a score of 1.440. This is followed by frequency of religious activity with a score of 1.417, then ownership of property with a very similar score of 1.412, and finally religion with a score of 1.367.

At the fourth level of splits, while the first node is headed by union membership with a score of 1.661, this is tied with number of people sharing an abode and frequency of religious activity. Ownership of a vacuum cleaner and salary tie in the next place, with a very close score of 1.547. The second node is headed by religion with a score of 1.193, which is followed by age (1.051), frequency of religious worship (0.885), frequency of religious activity (0.846), and finally length of tenure in the organisation (0.781). The third split at

this level has involvement with religious community outreach at the forefront with a score of 0.455. Language follows with a score of 0.386, which is followed by province with a score of 0.300. Area comes next with a score of 0.290, and finally age with a score of 0.263. For the next split, number of people sharing an abode comes in first with a score of 1.696. This is followed relatively closely by number of dependants with a score of 1.416. Salary comes next with a score of 1.321, and attending prayer meetings with a score of 1.284. Finally length of tenure in the organisation comes in, with a score of 1.161. The fifth split at this level is headed by area (0.263) but is narrowly followed by race with a score of 0.259. Frequency of religious activity and ownership of Ds-TV follow closely with score of 0.253 and 0.225 respectively. Job title then comes in with a score of 0.187. Length of tenure in the organisation heads up the sixth split with a score of 1.098, followed by union membership (0.950). Type of abode, number of people sharing an abode and number of children all tie for third place with a score of 0.923. The seventh split has the taking of chronic medication at the forefront (1.591). This is followed by frequency of religious activity (1.315), length of tenure in current position (0.958), ownership of a video machine (0.952), and finally ownership of a personal computer (0.948). While property ownership is first for the final split with a score of 2.176, this is in fact tying with the taking of chronic medication, age, and frequency of religious activity. Education comes in last with a score of 1.974.

The final CHAID analysis focussed on belief in an unjust world. Looking at the decision tree for belief in an unjust world (See Figure 6.16), it can be seen that the first split occurs on the basis of religious preference, with the first node comprising categories 2, 3, 5, and 8, (Muslim, Hindu, Protestant, and Methodist religions) and the second node, categories 4,6,7,9,11,13,and 14 (Catholic, Baptist, Anglican, Dutch Reform, New Apostolic, and minority religions). In the first node there are a total of 212 people, 26 (12.3%) of whom are

in Cluster 1, 25 (11.8%) are in Cluster 5, 13 (6.1%) are in Cluster 4, 54 (25.5%) are in Cluster 3, 82 (38.7%) are in Cluster 2, and 12 (5.7%) are in Cluster 1. In the second node there are a total of 253 people. Of these people 29 (11.5%) are in Cluster 6, 36 (14.2%) are in Cluster 5, 31 (12.3%) are in Cluster 4, 47 (18.6%) are in Cluster 3, 70 (27.7%) are in Cluster 2, and 40 (15.8%) are in Cluster 1.

The first religion node then splits on the basis of job title, with the first node comprising job categories 1, 6, and 14 (Administrative staff, Sales staff, and Financial staff) and the second node, job categories 2,3,4,5,7,10, and 11 (Laboratory staff, General Workers, Managerial staff, Supervisors/Foremen, Security staff, H.R. staff, Technical staff). There are a total of 72 people in the first node, of which 10 (13.9%) are in Cluster 6, 9 (12.5%) in Cluster 5, none in Cluster 4, 28 (38.9%) in Cluster 3, 21 (29.2%) in Cluster 2, 4 (5.6%) in Cluster 1. There are 140 people in node 2. 16 (11.4%) of these people are in Clusters 6 and 5 respectively, 13 (9.3%) in Cluster 4, 26 (18.6%) in Cluster 3, 61 (43.6%) in Cluster 2, and 8 (5.7%) in Cluster 1.

Following this branch, the first node of job title splits on the basis of number of dependants, with 1-7 dependants falling into node 1, and 9-10 dependants into node 2. The first node comprises 51 people, the largest number (24 or 47.1%) of which fall into Cluster 3. 6 (11.8%) people fall into Cluster 6, 9 (17.6%) into Cluster 5, none fall into Clusters 4 and 1 respectively, and 12 (23.5%) fall into Cluster 2. In the second node there are 21 people. Of these 21 people there are 4 (19.0%) in Clusters 6, 3, and 1 respectively, none in Clusters 5 and 4 respectively, and 9 (42.9%) into Cluster 2.

This first node splits again on the basis of number of dependants. The first node comprises those with 1-4 dependants and the second those with between 5 and 7 dependants. There are 45 people

in the first node, 6 (13.3%) of whom fall into Cluster 6, 5 (11.1%) into Cluster 5, none fall into Clusters 4 and 1 respectively, 24 (53.3%) into Cluster 3, and 10 (22.2%) into Cluster 2. There are 6 people in the second node. None of these people fall into Clusters 6, 4, 3, and 1 respectively. 4 (66.7%) people fall into Cluster 5, and 2 (33.3%) into Cluster 2.

The second 'number of dependants' node splits on the basis of number of jobs in the past five years, with 1-2 jobs in node 1 and 3-6 jobs in node 2. In this first node there are 14 people, the majority (9 or 64.3%) of whom are in Cluster 2. 2 (14.3%) fall into Clusters 6 and 3 respectively, and 1 (7.1%) falls into Cluster 1. None of these people fall into Clusters 4 and 5. In the second node there are a total of 7 people, 2 (28.6%) of whom fall into Clusters 6 and 3 respectively, and 3 (42.9%) of whom fall into Cluster 1.

Returning to the first split on the basis of job title, the second node in this split then splits on the basis of hospitalisation (i.e. if the respondent or any of his or her dependants have required hospitalisation in the past year), with people who have required hospitalisation in node 1 and people who have not in node 2. There are 50 people in the first node, 6 (12.0%) of whom are in Cluster 6, 4 (8.0%) are in Cluster 5, 7 (14.0%) are in Cluster 4, 8 (16.0%) are in Clusters 3 and 1 respectively, and 17 (34.0%) are in Cluster 2. There are 90 people in the second node, the largest number (44 or 48.9%) of who fall into Cluster 2. 10 (11.1%) fall into Cluster 6, 12 (13.3%) into Cluster 5, 6 (6.7%) into Cluster 4, 18 (20.0%) into Cluster 3, and none of whom fall into Cluster 1.

The first hospitalisation node then splits on the basis of length of tenure in the organisation, with people having been in the organisation for 1-8 years falling into node one, and those who have been there for 9-10 years into node two. There are 42 people in node 1, 5 (11.9%) of whom fall

into Cluster 6, 3 (7.1%) into Cluster 5, 6 (14.3%) into node 4, 7 (16.7%) into Cluster 3, 17 (40.5%) into Cluster 2 and 4 (9.5%) into Cluster 1. There are 8 people in the second node, with 1 (12.5%) person falling into Clusters 6, 5, 4, and 3 respectively. 4 (50.0%) people fall into Cluster 1. The second hospitalisation node splits on the basis of number of dependants, with those having between 1 and 5 dependants falling into node one, those with between 6-10 dependants falling into node 2. There are 79 people in this first node, the majority (43 or 54.4%) of whom falls into Cluster 2. 10 (12.7%) fall into Cluster 6, 8 (10.1%) into Cluster 5, 6 (7.6%) into Cluster 4, 12 (15.2%) into Cluster 3, and none of whom fall into Cluster 1. There are 11 people in the second node, none of whom fall into Clusters 6, 4, and 1. 4 (36.4%) fall into Cluster 5, 6 (54.5%) into Cluster 3, and 1 (9.1%) into Cluster 2.

Returning to the second main branch of the tree, the second node of religious preference splits on the basis of job title, with categories 3, 6, 10, and 14 (General Workers, Sales staff, H.R. staff, and Finance staff) falling into the first node, and categories 1,2,4,5,7, and 11 (Administrative staff, Laboratory staff, Managerial staff, Supervisors/Foremen, Security staff, and technical staff) falling into the second. There are 133 people in the first node, 11 (8.3%) of whom fall into Cluster 6, 15 (11.3%) into Cluster 5, 22 (16.5%) into Cluster 4, 13 (9.8%) into Cluster 3, 45 (33.8%) into Cluster 2, and 27 (20.3%) into Cluster 1. There are 120 people in the second node, 18 915.0%) of whom fall into Cluster 6, 21 (17.5%) into Cluster 5, 9 (7.5%) into Cluster 4, 34 (28.3%) into Cluster 3, 25 (20.8%) into Cluster 2, and 13 (10.8%) into Cluster 1.

The first ‘job title’ node then splits on the basis of race, with black and coloured people falling into node one and white people falling into node two. There are 111 people in the first node, the largest number of whom (42 or 37.8%) are falling into Cluster 2. 10 99.0%) are falling into Cluster 6, 14 (12.6%) into Cluster 5, 19 (17.1%) into Cluster 4, 12 (10.8%) into Cluster 3, and

14 (12.6%) into Cluster 1. There are 22 people in the second node, with 1 (4.5%) person falling into Clusters 6, 5, and 3 respectively, and 3 (13.6%) people falling into Clusters 4 and 2 respectively. 13 (59.1%) people fall into Cluster 1.

Following this branch, the first 'race' node splits on the basis of number of dependants, with those who have 1 dependant falling into the first node, and those who have between 2 and 10 falling into the second node. There are 5 people in the first node, 4 (80.0%) of whom fall into Cluster 1, and 1 (20.0%) who falls into Cluster 3. In the second node there are 106 people, 10 99.4%) of whom fall into Cluster 6, 14 (13.2%) into Cluster 5, 19 (17.9%) into Cluster 4, 11 910.4%) into Cluster 3, 42 (39.6%) into Cluster 2, and 10 (9.45) into Cluster 1. The second 'race' node splits on the basis of property ownership. This node is really an artefact of the statistical process, as the first node comprises both those who do and do not own property, and the second node comprises those who had a missing value for this question. As such this split has very little meaning for this study.

Returning to the second 'job title node', this splits on the basis of whether or not people engage in praying, with those who do falling into node one, and those who don't falling into node 2. There are 56 people in the first node, with 11 (19.6%) people falling into Clusters 6, 3, and 1 respectively. 13 (23.2%) people fall into Cluster 5, 4 (7.1%) into Cluster 4, and 6 (10.7%) into Cluster 2. There are 64 people in the second node, the largest number (23 or 35.9%) of whom fall into Cluster 3. 7 (10.9%) fall into Cluster 6, 8 (12.5%) into Cluster 5, 5 (7.8%) into Cluster 4, 19 (29.7%) into Cluster 2, and 2 (3.1%) into Cluster 1.

This first 'praying' node then splits on the basis of home ownership, with those who do own their own home falling into the first node, and those who don't into the second. There are 32

people in the first node, 2 (6.3%) of whom fall into Cluster 6, 10 (31.3%) into Cluster 5, 4 912.5%) into Cluster 4, 8 (25.0%) into Cluster 3, 3 (9.4%) into Cluster 2, and 5 (15.65) into Cluster 1. The second 'praying' node splits on the basis of religion, with categories 4,6,7,9,11, and 13 (Catholic, Baptist, Anglican, Dutch Reform, Zionist Christian, and New Apostolic religions) falling into the first node, and category 14 (Minority religions) falling into the second. There are 59 people in the first node, with 7 911.9%) people falling into Cluster 6, 8 (13.6%) into Cluster 5, 2 (3.4%) into Cluster 4, 22 (37.3%) into Cluster 3, 19 (32.2%) into Cluster 2, and 1 (1.7%) into Cluster 1. The second node comprises 5 people, 3 (60.0%) of whom fall into Cluster 4, and 1 (20.0%) of whom falls into Clusters 3 and 1 respectively.

In looking at which variables were competing splits in the belief in an unjust world decision tree (See Figure 6.17), it can be seen that for the first split religion won relatively narrowly with a score of 0.178. Property ownership follows with a score of 0.152, Praying with a score of 0.131, and number of dependants with a score of 0.121. For the second level of splits, job title heads the first node with a very narrow margin (0.256). Number of dependants follows with a score of 0.252. Property ownership then follows with a score of 0.244, age with a score of 0.221, and finally chronic illness with a score of 0.218. For the second node at this level job title once again came in first with a score of 0.310. Race follows relatively closely, however, with a score of 0.293. This is followed by level of education (0.202), and area (0.201). Investment is the last competing split, with a score of 0.187.

At the next level, the first node is headed up by number of dependants with a score of 0.949. This is closely followed by property ownership with a score of 0.888. Worship comes next (0.853), followed by religion (0.673), and length of tenure in the organisation (0.596). Hospitalisation heads the second node relatively comfortably with a score of 0.595. Number

of jobs in the past five years follows with a score of 0.474. Worship comes next with a score of 0.393, and is followed by number of dependants with a score of 0.363. Race follows closely with a score of 0.347. The third node at this level is headed by race, which came in very strongly with a score of 0.616. Area, the next competing split, has a score of only 0.394. This is closely followed by worship and number of dependants, both with a score of 0.392. Investment comes in last with a score of 0.348. Praying tops the final node at this level with a score of 0.447. The next split, that of marital status, has a score of 0.377. This is followed by province (0.350), number of children (0.303), and religion (0.266).

At the final level of splits, the first node is headed quite comfortably by number of dependants (0.598). The next split, that of salary, follows with a score of 0.409. Engaging in social activity within a religious context follows with a score of 0.399. This is followed by property ownership with a score of 0.368, and number of people sharing an abode with a score of 0.308. Number of jobs in the last five years heads up the second node (1.933). This is followed by property ownership 91.621), worship (1.425), having financial investments (1.420), and length of tenure in the organisation (1.395). Length of tenure in the organisation heads the next node (0.869), which is followed by worship (0.778), number of jobs in the past five years (0.764), number of children (0.728) and requiring an operation (0.723). The next node is headed by number of dependants (0.505), which is then followed by having insurance policies (0.328), province 90.314), number of children (0.294) and race (0.270). Number of dependants heads the next node relatively strongly with a score of 0.541. the next split, that of education, follows with a score of only 0.439. Number of children follows this very closely (0.438). This is then followed by number of jobs in the past five years with a score of 0.375. Property heads the next node with a score of 2.121. This is followed by education (1.912), age (1.620), and ownership of a fridge and salary, both with scores of 1.565. Home ownership

heads up the next node by a small margin, with a score of 0.975. Marital status, with a score of 0.951, follows closely. This is then followed by number of children (0.940), language (0.900), and finally car ownership (0.863). The final node is headed with religion (0.706). Having a partner with an income follows (0.576), as does type of abode (0.473), number of children (0.470), and age (0.468).

This belief in an unjust world CHAID, is more difficult to interpret than the previous two. The first reason for this is because the cluster analysis itself was not particularly meaningful (as discussed above) and as such associating the demographic determinants with a set of clear and explicit set of justice perceptions was effected – if the justice perceptions are not expressively defined than it becomes unclear what the demographic variables are determining. A second reason for the difficulty in interpreting the results is because, for the most part, there does not appear to be a very clear or discernible pattern of cluster affiliation. As can be seen by looking at the decision tree (See Figure 6.16), for many of the splits there are differences in cluster membership across most of the clusters. In this way it is not always possible to determine where the differences between the groups actually lie. A third reason for the difficulty in interpreting the results is the fact that the demographic groupings are not always easy to account for – often there is no apparent reason for the variables to group in the way that they do. This can all be seen more clearly when taking a closer look at the belief in an unjust world CHAID diagram.

The first split, the one based on religious affiliation, has separated out Muslim, Hindu, and Methodist religions from the others. This is very similar to the belief in a just world split, where the doctrine-based religions are separated from the more individualist/affective orientated ones. One difference is that within the belief in an unjust world decision tree the

Catholic group falls into the other grouping. This is somewhat surprising as it is arguably one of the clearest examples of a doctrine-based religion. Given the interpretation of the belief in a just world CHAID, it would be difficult to explain while Catholics would be placed with the other group. None the less this still remains the best explanation for the grouping defined by the CHAID analysis. Looking at the cluster affiliations it can be seen that there are two important differences between the two groups, these being in relation to Cluster 4 and Cluster 1. Cluster 4 comprises people who believe that the world can be an unfair place, and there are significantly more of the individualistic/affectively-focussed religions in this cluster than of the doctrine-based ones. Once again this is a somewhat similar pattern to the one found in the belief in a just world tree, where affiliates of these religions are possibly more prone to seeing the injustice in the world. Alternatively there are more of the affiliates of the doctrine based religions in Cluster 1 which was characterised as comprising people who seem to hold the view that people have agency in the good that happens to them, but possibly not in the bad. This is arguably consistent with the doctrines of these religions that exhort people to work hard in order to do well, but also to except the will of God when bad things happen. Again this is echoed in the just world beliefs decision tree.

Both of these religious categories then split on the basis of job title, with relatively similar groupings emerging. For the doctrine-based religions administrative, financial, and sales staff are separated out from the other job titles. For the most part the jobs described refer to the back up or auxiliary functions within the organisation, rather than those who are involved in the manufacturing aspects. These jobs also have somewhat of a financial emphasis, and people involved in such jobs are likely to have a clearer sense of the profitability of the organisation than people doing more task specific jobs. Looking at the cluster affiliations, it can be seen that there are four notable differences between these two sets of job groupings. There are more people in the auxiliary jobs category in Cluster 3, and

fewer of them in Clusters 4 and 2. Cluster 4 comprises people who believe that the world can be an unfair place, while Cluster 2 comprises people who do not believe that the world is an unjust place. Arguably people in this job grouping are not extreme or generalised scorers and they do not hold one set of consistent ideas about social injustice. On the other hand Cluster 3 comprises people who are largely neutral or unsure with regards to questions about social injustice, but who do have a clear tendency to disbelieve that unfair things happen. As such there could be an indication that people falling into these job categories are more ambivalent or have the capacity to hold more ambiguity than people in the other job grouping.

The auxiliary jobs then split on the basis of the number of people who are dependent on them for financial support, with the first group comprising those with between 1 to 7 dependants and the second group 9 or 10 dependants. This split seems to be based on the most extreme group separating out – 9 or 10 financial dependants is arguably relatively extreme. When looking at the cluster affiliations it can be seen that there are a number of significant differences between the groups – in fact in all but Clusters 6 and 4. The most marked of these relate to Clusters 2 and 5, with noticeably more of this extreme group in Cluster 2 and fewer (in fact none) in Cluster 5. People in Cluster 5 are also largely neutral or uncertain regarding the majority of items, but is the only group who believes that the South African legal system is failing, while Cluster 2 comprises people who do not believe that the world is an unjust place. It is difficult to explain why people who have so many people financially dependent on them are still convinced of the justness of their world. A tentative explanation could be the influence of the interactions of the previous variables. Firstly, this grouping belongs to a grouping of jobs that are relatively well paid, particularly in relation to more unskilled jobs in the organisation. As such having so many financial dependants might

be less of a financial strain on them. Secondly, this group are also affiliates of the more doctrine based religions that arguably have particularly cogent church structures that have a strong emphasis on organised charitable work. As such people in this group may be more accustomed to the notion of assisting others.

The second group of job titles splits on the basis of whether they or any of their financial dependents have required hospitalisation in the past two years. This bears some resemblance to the belief in a just world CHAID discussed above, where a similar question related to having had an operation in the last two years emerged as significant. At first such a question might seem rather arbitrary, but on closer inspection can be understood as an indicator of other things, for example some degree of hardship or trauma, the possibility of increased financial burden, or even the frustration of having to deal with a highly problematic health system. It is difficult to assess where meaningful differences in cluster affiliation lie between these two groups. There does seem to be a relatively noticeable difference in relation to Clusters 1 and 2, with more people who have had operations being in Cluster 1, and fewer in Cluster 2. Cluster 1 was characterised as comprising people who seem to hold the view that people have agency in the good that happens to them, but possibly not in the bad, while Cluster 2 comprises people who do not believe that the world is an unjust place. It is possibly plausible that people who have had the experience of either themselves or their family being hospitalised might be less likely to believe that people bring on their own bad fortune. Similarly, it also seems understandable that fewer of them would be likely to see the world as a uniformly just place.

With regards to the last level of splits for this first branch, the grouping sizes become either too small or have too disparate sizes between groups to make any meaningful comparison.

Arguably, however, the nature of the splits themselves holds some insight. For example, those with fewer dependants were again split on the basis of number of dependants. Effectively the CHAID made the first split on the basis of separating out the very extreme group, but then split the remaining group, which covered quite a large range, into two more groups – the first comprising those with 1to 4 dependants, and the other with between 5 to 7 dependants. This is interesting in itself as it is an indication that groups can be split in different ways at different times – i.e. having a certain number of dependants is not as relevant under certain circumstances as it is under others. This points to the extent of complexity that exists when looking at he predictive power of demographic variables. Further to this, number of dependants features twice more in this last row of splits, indicating that it is an important determinant of justice perceptions. Once again this is perhaps because it is indicative of more than just financial circumstances. It changes the quality of domestic life people have, and arguably even the quality of social life.

Moving back up to the second main branch of this CHAID, for the second religious grouping, sales staff, financial staff, human resources staff, and general factory workers are separated out from the other job categories. Again, there seems to be no apparent reason as to why these particular jobs should be separated out from the others. While sales, human resources, and financial staff could be explained in a similar way to the job title split in the first branch, i.e. as jobs with an auxiliary function and with a focus that emphasises the financial profitability of the organisation. One big anomaly in this grouping, however is that of the inclusion of general factory workers. There is no apparent reason what this job title has in common with the three other job titles. In fact, it is only their differences that are particularly noticeable – they are different in the level of skill needed to do each set of jobs, the nature of the work done, as well as the conditions under which people doing these two

sets of jobs work. Further to this Cluster affiliations differ relatively substantially between almost every cluster for this group. As such this split is difficult to contextualise or explain in any meaningful way. This does have implications for the rest of this branch, as the other splits are contingent upon this split. These other splits thus become more difficult to understand as well.

This first grouping of jobs splits on the basis of race, with black and coloured respondents forming one group, and white respondents another. In and of itself this is perhaps unsurprising given both the history of this country, where white people were dominant culturally, socially, and economically, and the present, where attempts at redress have more negative implications for white people. Again while there are a number of differences between the groups with regards to cluster affiliation, the most marked are in relation to Clusters 1 and 2. There are significantly more white people in Cluster 1 than black or coloured. People in Cluster 1 have relatively extreme views, with there being some general sense that misfortune happens to people quite randomly, unrelated to what they deserve or not, but positive efforts will be acknowledged and rewarded. People in this cluster seem to hold the view that people have agency in the good that happens to them, but possibly not in the bad. Cluster 2,on the other hand, comprises people who do not believe that the world is an unjust place. Given that the Apartheid government was defeated and that there is now a democratically elected government in place that is representative of the majority of people in this country, it makes sense that black and coloured people would be more prone to believing that the world is not an unjust place.

The second grouping of job titles was split on the basis of whether or not they prayed when nor at their place of worship. Again this might seem like a somewhat particular question, but

it was asked as part of a series of questions aimed at gauging the extent of religious life a respondent was engaged in. The first group thus comprises people who pray even when they are not at their place of worship and the second group, people who do not. This seems an appropriate split given that he first split was made on the basis of religious affiliation. Arguably this split is delving further into this initial determinant by seperating out those who are more religiously active than those who are not. The cluster affiliations, however, are less meaningful in that there are differences between the two groups on almost every cluster. As such it is not clear where specific differences between these two groups lie.

As with the first branch of this CHAID decision tree, the last level of splits becomes difficult to interpret as the groupings become too small or disparate in numbers to compare. Further some groupings are made on somewhat arbitrary grounds. For example the property grouping is done on the basis of missing data versus both those who do own property and those who do not.

As can be seen, this CHAID is somewhat less meaningful than the previous two. Interpretations are difficult to make, and the explanations become slightly clumsy and increasingly speculative. Arguably the real value of this CHAID is in looking at which variables were identified as the more central determinants of justice perceptions. This will be discusse din more detail in Chapter 7.

Concluding Remarks

Through the course of this chapter the results of the statistical analyses used to analyse the measuring instruments, explore the data set, and answer the research questions have been reported. A number of significant findings have emerged. Starting with the

validation of the measuring instruments, it was found that the organisational justice perceptions scale was both valid and reliable, with results found in the pilot study (described in Chapter 5) replicating themselves in the main study. The belief in a just world scale, developed by Rubin and Peplau (1973), however, reported a very low Cronbach's alpha, indicating an unreliable scale. A factor analysis was conducted and a two factor solution indicated the possibility of two separate scales or variables under investigation – that of just and unjust beliefs. Given that these two variables have a significant but very weak relationship, it was argued that they were measuring related but separate constructs. As such social justice perceptions were split up into perceptions of social justice and perceptions of social injustice. The two sub scales reported satisfactory Cronbach alphas.

With regards to the cluster analyses, each of the three justice variables were analysed individually. A six-cluster solution was retained for each of these justice dimensions. Looking at the organisational justice perceptions clusters, people in Cluster 1 may be characterised as having a general sense of injustice regarding most organisational practices. There is a particular emphasis on those practices that allow people to progress and develop within the organisation, as well as the quality of the relationship between managers and employees, particularly with regards to the use of authority. Cluster 2 can be defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly. Cluster 3 can be defined as comprising "generalised high justice perception scorers" who have fairly consistent perceptions across all the items. People in this cluster have a generalised positive attitude to the organisation indiscriminately perceive everything to be just and fair. People in Cluster 4 may be characterised by a strong distributive

concern, as well as dissatisfaction with the less observable aspects of organisational practices. Cluster 5 comprises people who are less consistent with regards to their perceptions of justice in relation to different areas of organisational functioning and are characterised as being relatively satisfied with collective industrial relationship issues, but less so with the individual material benefits. People in Cluster 6 can be characterised as having moderate/moderately low organisational justice perceptions, being more dissatisfied with the collective relationship between management and employees than with practices that impact on individual well being in the organisation. People in this cluster also seem to have more trust in their colleagues' capacity to act fairly.

Looking at perceptions of social justice, people in Cluster 1 can be characterised as believing that justice is unlikely to be done, and the world is not a place where each gets his due. People in Cluster 2 can be characterised as being largely undecided, particularly with regards to the fairness of broader social systems. However, they do seem to feel a little more strongly about individual effort and reward, believing that at a personal level you are more likely to benefit from your own efforts. Cluster 3 comprises people who believe that justice will, for the most part, be done, both at a personal and a broader social level – that if you work hard you will get good marks, will be promoted, will stay healthy, but also that key social institutions such as the political system, and the criminal justice system, will prevail. People in Cluster 4 may be characterised as generally neutral to moderately low scorers, who have less faith in an individual's capacity to influence their own outcomes. They do, however, have a slightly stronger belief than people in Cluster 2, that broader social systems will, in the long run, be fair. People in Cluster 5 can be characterised as having an almost fatalistic approach to injustice or misfortune, while on the other hand they have a stronger sense of agency when related to the achievement of good. Despite their beliefs related to

misfortune, there is also a strong belief that ultimately, justice will prevail. Finally, Cluster 6 can be defined as comprising people who have a general sense that the world is not a fair

Figure 6.14: CHAID Tree - Belief in a Just World

Figure 6.15: Competing Splits Tree - Belief in a Just World

Figure 6.16: CHAID Tree - Belief in an Unjust World

Figure 6.17: Competing Splits Tree - Belief in an Unjust World

place – there is no guarantee that anyone will actually get what they deserve. In fact, people in this group seem to quite strongly believe that people might benefit from immoral or unjust actions, such as crime. At the same time, there does not seem to be sense that bad things will happen to people who don't deserve them. As such people in this group seem to believe that while the world is not necessarily a fair place, neither is it unfair.

The final cluster analysis was conducted on perceptions of social injustice. The cluster analysis grouped the high and low scorers together respectively, and has differentiated between the middle scorers according to particular items of difference. Cluster 4 comprise people who believe that the world can be an unfair place, while Cluster 2 comprises people who do not believe that the world is an unjust place. Cluster 6 comprises people who, for the most part, do not view the world as being unjust and who do not seem convinced that injustice will happening to undeserving people. Similarly Cluster 3 comprises people who are largely neutral or unsure with regards to questions of unfairness in the world, but who do have a clear tendency to disbelieve that unfair things happen. The question related to driving is the one item that differentiates these two groups, with this being the only item that people in Cluster 6 strongly agree with. Cluster 5 comprises people who are more neutral or undecided about questions of injustice but feel relatively strongly that the South African legal system is failing. Like Clusters 6 and 3 above, it is this item that differentiates people in this cluster from the other more 'neutral' clusters. Finally, people in Cluster 1, while largely neutral or undecided, can be characterised as veering towards having a stronger sense of social justice, where bad things do not happen to people who do not deserve them.

The last step in the analysis was the CHAID, which explored the ways in which the demographic variables predicted perceptions of justice (based on the clusters). The

organisational justice perceptions and belief in a just world decision trees indicated some important interactions between demographic variables and highlighted the ways in which these might impact on justice perceptions. The belief in an unjust world CHAID decision tree, however, was less meaningful and provided only limited insight into the relationship between demographic variables and justice perceptions. These will be considered in more detail in the next chapter, which has the discussion of these results as its central focus.

Chapter 7: Discussion

Introduction

In Chapter 5, three research questions were outlined that form the thrust of the current study. Different statistical procedures were used to answer these questions, the results of which were presented in Chapter 6. The aim of the current chapter is to discuss these findings, both in relation to the conceptual framework of this study described in Chapters 2, 3, and 4, as well as in relation to the research questions framed in Chapter 5.

The chapter begins with a discussion of matters pertaining to the first research question, that regarding the nature of the relationship between organisational and social justice perceptions. The second section then looks at the notion of different justice dimensions, focusing on the cluster analysis results and the themes that emerged from this analysis. The third section of this chapter focuses on the relationship between demographic variables and justice perceptions, discussing the key points to emerge from the CHAID analysis. Finally, the limitations of the current study are discussed, as are implications this study has for future research.

Organisational and Social Justice: The Importance of Context

The first research question pertained to the relationship between different dimensions or types of justice, particularly social and organisational justice. As was discussed in Chapter 3, researchers have argued that organisational justice concerns are autonomous and independent of other justice concerns (Cropanzano, 2001). This assertion has resulted in the emergence of a distinct 'variable', that of organisational justice, that is seen to be discrete from the rest of the justice literature. Despite this, there is no clear evidence that this claim

to autonomy is true. Organisational justice research has not focused on providing empirical evidence for this contention, nor has a body of theory specifically aimed at addressing workplace concerns emerged. Currently, what delineates this variable as something distinct is the context in which it is investigated – the workplace. It is, therefore, clear that the notion that organisational justice is something separate from other types of justice requires debate and empirical investigation. To this end, the first research question addressed by the current study pertained to the interface between different 'types' of justice, more specifically that of organisational and social justice, and asked whether people's experiences of organisational justice related to their experiences of social justice.

As was described in Chapter 6, social justice perceptions were divided into two sub-scales, that of belief in a just world and belief in an unjust world. This was because the belief in a just world scale reported a very low Cronbach alpha (0.40), indicating that there is insufficient inter-item correlation to assume that all the items in the scale are measuring the same construct – that is, belief in a just world. A factor analysis was therefore conducted in order to explore the scale further. This revealed the existence of two factors related to 'just' and 'unjust' dimensions respectively. Looking at the relationship between belief in a just and unjust world, it can be seen that there is a significant, albeit fairly weak, negative correlation between these two constructs ($r<0.00$, $p=-0.25$). The fact that they are correlated is unsurprising, given that just and unjust experiences have traditionally been spoken about as opposite ends of one continuum (Lerner, 1986; Cropanzano, 2001). The decision to use these two sets of perceptions as two separate variables is documented in Chapter 7 of this thesis, where this low correlation has been understood as evidence towards the fact that these constructs are not simply opposite ends of the continuum, but can be viewed as separate sets of perceptions. The low correlation indicates that if one has high beliefs in a

just world that does not necessarily mean that one would have a corresponding low belief in an unjust world. For example, as discussed in Chapter 6, one could believe that the world was not a just place (good things don't necessarily happen to good people, or bad to bad people), without believing that it is in fact an unjust place (bad things will happen to good people and good things to bad people). For this reason a low correlation between these variables makes sense. Why then is there a significant relationship between these variables at all? Some discussion of the existing relationship between these two variables is important.

If one works from the assumptions of Lerner (1986) and the subsequent work on the Belief in a just world construct (Bruhn, 1998; Furnham & Procter, 1989; Rubin & Peplau, 1973, Couch, 1998; Ambrosia & Sheehan, 1990; Hyland & Dann, 1987), this variable can be understood as a personality trait – a fairly consistent and stable feature of an individual. If we extend the idea of a belief in a just world, as described by Lerner (1986), to incorporate the notion of two separate constructs – a belief in a just world and a belief in an unjust world as two separate personality traits – it is plausible to assume that within this framework of understanding, they are mutually exclusive. A person cannot hold high beliefs in a just and an unjust world simultaneously. As such these theorists argued that people are disposed towards a particular attitude to the world (Lerner, 1986; Rubin and Peplau, 1973), almost a form of justice 'optimism' or 'pessimism'. Working from this understanding, a person who is disposed to seeing the world as a just place might then be less prone to seeing possible injustice, and vice-versa. So while these variables do not work as complete opposites to one another, there might be a tendency for a person registering high in one set of perceptions to be slightly lower in the other set, as a consequence of the lens through which they tend to see the world. It could be argued that it is the personality factor that relates these variables to one another, albeit it rather weakly.

However the notion that belief in a just world is exclusively a personality trait is somewhat contested. Research has indicated that context and experience cannot be discounted as important factors – in fact are more important than individual disposition - that influence one's attitude towards the world (Furnham, 1985; Furnham, 1993; Witt, 1989; Graham, 1989). A similar argument could be made for looking at context and experience, as one could for personality. Personality variables are arguably not the only factors that dispose people to certain attitudes, perceptions, or beliefs. A person's experience in the world, particularly relating to the context in which they find themselves, could potentially provide a 'lens' through which they would judge certain situations. For example, a black person living in Apartheid South Africa and experiencing the injustices present within that context, might not have a personality disposition to seeing the world as an unjust place, but rather a disposition based on experience, i.e. they may be high in belief in an unjust world, and because of their experiences have a tendency to not see justice where it exists, situating them lower in terms of belief in a just world. They might be prone to seeing less justice, but not necessarily injustice. These two variables, we can deduce, while essentially functioning independent of each other, could also quite plausibly be related.

This has important implications for social psychology's approach to understanding justice. There is an indication that, perhaps, perceptions of justice and injustice cannot be spoken of as opposite ends of the same thing, or treated interchangeably. Each might have different antecedents, correlates, and outcomes. For example, perceptions of organisational injustice might result in poorer work output whereas perceptions of justice might not result in better performance. Similarly perceptions of social justice might result in positive citizenship behaviours and civic pride, where perceptions of social injustice might not be linked to acts

of public vandalism or disregard for civil property. Perceptions of injustice might evoke stronger emotions and reactions than perceptions of justice; less might need to happen to evoke a sense of injustice as opposed to a sense of justice. Perceptions of injustice might be more pervasive than perceptions of justice. For this reason, theory and research is warranted that explores each of these variables independently.

This preliminary work laid the foundation for the way in which social justice is understood and analysed in the rest of the study, namely in relation to two sets of independent beliefs. Correlations were then used to explore the relationship between organisational justice perceptions, belief in a just world, and belief in an unjust world.

The correlations between all three justice variables (See Table 6. 22) were very low, some not even significantly so. This is interesting in that it indicates that not all facets or dimensions of justice perceptions operate in the same or similar ways. Organisational justice perceptions are not significantly related to belief in an unjust world ($r=-0.01$, $p=0.85$), indicating that a person may have low social justice perceptions, but this may not necessarily transfer into the organisational setting. Organisational justice perceptions are only very slightly correlated to belief in a just world ($r=0.107$, $p=0.021$). This means that where the one increases or decreases there would be a slight increase or decrease in the other. As such high social justice perceptions would be slightly related to high organisational justice perceptions.

It is interesting to note that while the correlation between organisational justice perceptions and belief in a just world is low, it is still significant, unlike that of organisational justice and belief in an unjust world. This is a further indication that beliefs about the fairness of the

world do not function as opposite ends of a continuum – if this were true we could expect there to be similar, but inverted, correlations between these two variables and organisational justice perceptions. Why, then, would the one be significantly correlated to organisational justice perceptions (albeit very slightly so) and not the other? A possible explanation could be related to the extent of personal exposure to the different issues being explored. Organisational justice perceptions are perhaps more likely to be based on a greater amount of personal experience than social justice perceptions. Perceptions of organisational justice are based on factors such as the salary that I earn, my relationship with my manager, my opportunities in the organisation – all matters that directly affect me and with which I am directly engaged. Social justice perceptions (as measured in this study), on the other hand, are based on beliefs about, for example, fair trials, the punishment of criminals, or the performance of politicians in society. While people may have strong opinions of such matters, the majority of respondents will not have been through a trial, or have had a close encounter with a politician. As such, these perceptions are not based on as much personal experience as organisational justice perceptions. A person may have very strong beliefs about social injustice, without those beliefs being related to their actual experiences of justice in their own workplace.

Belief in a just world and social fairness, on the other hand, may have particular importance for people in the South African context, particularly for the type of sample involved in this study (see Table 5.1). Given that the majority of respondents are black, and the average age of respondents is 39, this is a group of people who, for the most part, are likely to have been very deeply affected by the injustices of Apartheid. They would have grown up under restrictive and prejudicial laws that would have prevented them from accessing a range of opportunities and resources. They also would have experienced the end of Apartheid, and

the introduction of a range of new laws that have attempted to rectify prejudicial legislation as well as redress past imbalances. It is likely that, for the majority of these respondent's, broad social changes would have had a direct positive impact on their lives. There is some evidence of this in the summary statistics for the variables (see Table 6.18). The mean score for belief in a just world is 36.67, which indicates a moderately high score. The mean score for belief in an unjust world, on the other hand, is 23.32, a moderately low score. This means that, on average, perceptions of a just world were higher than that of an unjust world. These broad societal changes have also had a direct impact on the workplace, where a range of labour laws have been introduced since 1995 that have addressed a number of workplace injustices. This legislation has introduced, among other things, more favourable conditions of employment for workers, stricter procedures for the dismissal of workers, affirmative action measures aimed at previously disadvantaged groups, a greater emphasis on workplace safety, as well as broader and more entrenched rights for unions and employee representatives. These aspects of improved workplace fairness are directly related to broader social justice initiatives. As such it is unsurprising that there is some correlation between organisational and social justice perceptions.

The fact that the correlation is not higher deserves some exploration. As discussed, the summary statistics (see Table 6.18) indicate a mean score of 68.86 for organisational justice perceptions, a moderately low score. As mentioned in the previous paragraph, there is a moderately high score for belief in a just world. This indicates that people are experiencing their broader social world as being fairer than their workplace. This could indicate that transformation into a more just society is happening more visibly or more quickly at a societal level, whereas changes are occurring more slowly in the workplace. As discussed in the previous paragraph, there are some aspects of the workplace that have become more just,

simply due to new labour legislation. Other aspects of the workplace, however, may still be experienced as unfair to employees. The workplace is one arena where people of different races mix at very close quarters. There are a number of different competing interest groups within organisations, all of which are fighting for limited resources. Many practices and policies are contested (for example, the implementation of affirmative action policies). Transformation and organisational change are partly dependent on the personalities and dispositions of managers, union representatives, and employees, and are affected by the industrial relations climate. Many aspects of workplace fairness are, therefore, not necessarily closely related to social justice initiatives. Therefore, while we can expect some correlation between organisational and social justice perceptions, it is also understandable that such a correlation be limited.

From the above discussion it can be seen that the three variables used in this study, while all measuring aspects of justice, are in fact measuring independent, and to a large extent, uncorrelated aspects of justice. This points to the interesting notion that one cannot talk about 'justice perceptions' as a unified entity. This is in line with arguments made by Walzer (1983), who states that there are spheres of justice that must be kept distinct from one another. He argues that justice is about the distribution of goods, but considerations will differ depending on the type of goods in question. Therefore, we cannot have one set of standards or criterion for the distribution of disparate goods/conditions as money, love, work, religion, political power etc. He argues that we can have inequalities in one sphere without having inequalities in another sphere. Clearly justice takes on different meanings within different contexts, and one's beliefs about justice in one context cannot be taken as indicative of beliefs in another context.

This is perhaps indicative that personality or personal disposition might have less of an influence on justice perceptions than previous researchers may have believed (Lerner, 1986; Rubin and Peplau, 1973) as evidence points to the fact that a person may not have a consistent set of beliefs about justice across all contexts in their lives. This arguably points to the importance of more objective criteria when exploring perceptions of justice, i.e. some people may experience a particular context as fair/unfair, not because they have a disposition or particular type of personality, but because that context either facilitates or prevents their access to valued resources. This implies that perhaps psychologist's need to move beyond a purely relativist understanding of justice.

Further, the importance of context with regards to the impact on perceptions of justice indicates that more context-specific social-psychological theory and research is warranted. Arguably it is not sufficient to operate from one theory base in an attempt to explain or describe experiences of justice across different settings. For example, the tripartite justice model might be valuable when exploring justice perceptions within an organisational setting (where formalised policies highlight the divisions between procedures and outcomes, and organisational structures and hierarchies result in a distinct set of social relations and centralised mechanism of decision-making), but a different conceptualisation might be more beneficial when looking at social justice (where such distinctions are not as clear).

Given the indication that justice perceptions function differently across contexts, it is important to look at why only two contexts – that of social and organisational – have been distinguished as important sites for social-psychological research, and why an increasing proportion of research is focussing exclusively on the workplace setting. As discussed in Chapter 3, the organisation functions as a microcosm of the larger society, with distinct

rules, processes, boundaries, and ways of functioning, making it an interesting, as well as easy, context for the study of justice. Further to this, however, within this paradigm, justice theory is seen predominantly as a theory of motivation. Tyler and Blader (2000), argue that, "Justice must be able to motivate both the acceptance of rules and decisions and efforts to help the group even when either departs from individual or group self-interest. In terms of social co ordination, justice has little value if it does not influence how people feel and what they do." (p. 70). They argue that research findings that support the notion that justice perceptions influence people's attitudes and behaviours point to important policy implications in that, "They suggest that we can encourage desirable behaviour from the people in groups by creating group frameworks that are experienced as fair" (Tyler and Blader ,2000,p. 8).

The view that justice perceptions can be used to mitigate the negative effects of certain workplace policies or enhance employee functioning is a common thread running through organisational justice research. As described in Chapter 3, employee commitment, morale, turnover intentions, organisational citizenship behaviours, productivity, theft and a host of other attitudinal and behavioural variables have all been explored in relation to perceptions of organisational justice (Greenberg, 1990; De More, Fisher & Baron, 1988; Skarliki & Folger, 1997; Schwarzald, Kowslowsky & Shalit, 1992; Cropanzano & Greenberg, 1997; Cowherd & Levine, 1992; Pfeffer & Langton, 1993; Schwarzald, Kowslowsky and Shalit, 1992). Organisational justice research has arguably emerged as a primary concern for organisational behaviourists because organisations are a context in which profit-making is the primary motive, and human behaviour is key to this motive. In this way, organisational justice is perhaps emerging as a managerial science, rather than a social science.

While there is clearly a considerable amount of value to be gained from this type of organisational research, the results of this study perhaps indicate that a focus on a range of different contexts is warranted. A number of different settings pose particular challenges and nuances that might significantly impact on the factors that become salient when making a justice judgement. Such settings include prisons, courts, schools, families, unions, hospitals, and welfare institutions. By expanding justice research in this way, other factors and priorities might emerge, allowing for a more nuanced and complex understanding of experiences of justice.

As will be seen in further discussions in this chapter, the independence of these types of justice from one another is further evidenced by the CHAID results, which indicate that perceptions of each of these variables are predicted by very different demographic variables.

Dimensions of Justice: Moving beyond the Tripartite Framework.

In Chapter 2, the tripartite or three-factor model most commonly used as a framework for investigation by social psychologists was described. This model comprises distributive justice concerns which focus on the perceived fairness of outcomes, procedural justice concerns, which focus on the way in which outcome decisions are made, and interpersonal justice perceptions which are understood to refer to the quality of treatment received from decision-makers (Cropanzano et al, 2001). As was demonstrated in both Chapters 2 and 3, these three dimensions are most commonly taken to account for justice perceptions, and this model is used as the foundation for the vast majority of research taking place in the area of justice studies. It was further argued that there seems to have been an over emphasis on this

three-factor model, and that this framework presents some concerns that may serve to limit research in the area (Lind, 2001).

Following from this, one of the aims of the current study was to explore alternate conceptualisations or dimensions of justice. This was partly done through the use of more global scales for the measurement of both organisational and social justice perceptions, but was also addressed through the cluster analysis, which explored the ways in which people group together in terms of their perceptions of justice. Score profiles based on responses to each of the items in the respective scales were cluster analysed in order to explore what similarities or shared profiles existed among respondents. While this was also the preliminary step for the CHAID analysis, it also provided some interesting insights in and of itself, in that it indicated possible alternative patterns of concerns that people might share. This was particularly important given that the structure of justice perceptions was not assumed in the current study, and that exploring alternate dimensions of justice concerns that might emerge became central. The second question addressed by the current study, therefore, refers to similarities in experiences of justice and asked in what ways people clustered together in relation to their experiences of justice.

As discussed in Chapter 5, the cluster analyses explore the ways in which respondents' profiles of responses cluster together based on similarities in these responses. Such a method avoids an overly reductionist approach to analysis in that an entire scale is not reduced to one index through adding up all the responses to form a score total. In this way each of the respondent's answers is taken into account, and the differences between respondents becomes more apparent. With regards to organisational justice perceptions, as discussed in the results section (Chapter 6), a six-cluster solution appeared to be the most suitable

explanation of similarities of responses. This meant that six groupings of people who shared similar response profiles were extracted from the cluster analysis. These six clusters were then described and defined in relation to what these profiles indicated about their perceptions of organisational justice.

Cluster 3 comprised people with high organisational justice perceptions who have a generalised positive attitude to the organisation, almost indiscriminately perceiving everything to be just and fair. This cluster was, therefore, defined as comprising "generalised high justice perception scorers". People in Cluster 2 also appeared to be fairly consistent in their perceptions across items, but were slightly more critical than those people in Cluster 3. This cluster was defined as comprising people who personally experience the organisation as fair, but have concerns about more general practices that may or may not affect them directly. People in Cluster 5 had more moderate justice perceptions than those in Clusters 3 and 2, and were characterised as being relatively satisfied with collective industrial relationship issues, but less so with the individual material benefits within the organisation. Cluster 6, on the other hand, appeared to follow the opposite trend to this, with people in this group appearing to be more satisfied with human resources practices, but less so with the industrial relationship in the organisation. People in Cluster 6 were, therefore, characterised as having moderate/moderately low organisational justice perceptions, being more dissatisfied with the collective relationship between management and employees than with practices that impact on individual well being in the organisation.

Cluster 4 marked a much clearer move into lower justice perceptions and comprised people who, while they express neutrality regarding certain human resource practices, were generally feeling that the organisation treats employees unfairly. Their concerns rested with

process-driven practices that have less observable procedural mechanisms, such as employees being part of the decision making process. Finally, Cluster 1 comprises the lowest scorers for almost every item, with people in this group being particularly concerned with their capacity to progress in the organisation. People in this cluster appear to have very little sense of hope with regards to moving out of their current positions, and have particularly low justice perceptions about direct and related practices that would potentially enable them to do so. Their concerns appear to rest more substantially with highly visible, observable procedures. This is contrary to the pattern observed in Cluster 4. These two clusters, while both having low organisational justice perceptions, are quite clearly differentiated by their areas of concern.

These different clusterings indicate some important justice concerns that differentiate groups from one another. As discussed in Chapters 2 and 3, the traditional psychological justice model creates three dimensions of justice, which form the basis for most enquiries. This cluster analysis indicates other dimensions that such a model neglects. For example, there seems to be a differentiation between collective and individual issues with regards to justice perceptions, where people are discriminating between those policies, procedures, and practices that affect them individually and those that refer to collective groups in the organisation, such as union members or managers. There is a clear indication that people might judge issues that effect them personally (e.g. salary) differently from those that don't (e.g. selection procedures if one is not applying for a job or promotion), or that apply to a grouping of people of which they may or may not be a member (e.g. performance appraisals may be judged as fair for managers and senior people, but as unfair for employees below a certain level of seniority). As will be discussed further on in this section, similar concerns emerged when looking at social justice perceptions.

This differentiation should not simply be interpreted as relating to the notion of self-interest (i.e. if it benefits me it is fair, if it prejudices me it is unfair, if it does not apply to me I don't care). It is clear that people form justice judgements about a range of events, policies, procedures, decisions, and distributions, even those of which they have no personal experience or which will not impact on them at all. For example, people are likely to have opinions about the fairness of a dismissal of an employee for theft, the disciplinary procedures in place in the organisation (even though they are likely to feel sure they will never be subject to them), or management's relations with unions (even if they are not a union member). Clearly, justice concerns do extend beyond pure self-interest. The differentiation between collective, individual, and personal matters emerging in this study can be accounted for by a range of other factors such as the impact of real-life experience people have had with the matters that they are judging, the extent to which they would have to deal with the consequences (both good and bad) of the procedure or outcome, whether or not they are invested in what happens to other people in the organisation, as well as the impact the procedures or outcome may have on their relationships with others around them. Further, this may be particularly relevant to the South African context, where there is a highly unionised work force and a history of union activity and instrumentality both politically and within the work arena. Much of the industrial relationship in South African organisations is played out at a collective level, and there is a clear differentiation between collective and individual organisational politics.

Another dimension around which clusters seem to differ relates to organisational practices that are unambiguous and easily observable (and are process or administratively driven) versus those that rely on more subjective individual input (and are most often driven by

managers). This dimension could be seen as a content driven – people trust that jobs get advertised, that they can apply for training programmes, and that management will meet with unions regularly – versus process driven – they are less trustful of how an applicant is selected for a job or for training, the ways in which management might co operate with unions, how a disciplinary hearing chair makes a decision. This clearly links to some of the concerns outlined in Lind and Tyler's (1988) group-value model of justice, which identifies three elements that become of value to people when making justice judgements, namely trust, standing and neutrality. The differentiation between more visible, content driven issues and process issues might be reflecting particular concerns with trust and neutrality - where trust pertains to the perceived intentions of the third parties, and involves the belief that they desire to treat people in a fair and benevolent manner and neutrality to the extent to which an individual believes decision-makers are neutral and free from bias with regards to such decision-making (Lind and Tyler, 1988). Arguably it is a lack of trust and belief in neutrality that would result in some scepticism or concerns about less visible processes as opposed to the policies and processes that are more visible and for which managers are more accountable.

An additional dimension around which the clusters differed relates to the way in which the employment relationship is defined. There seems to be some indication that people differentiate between relationships with their peers and relationships between management and employees when making justice judgements. This might be an indication that notions about social group membership (as described by Tjafel and Turner (1975) and discussed in Chapter 4) extend into the organisational setting, and employees assess events or matters of concern to their own group differently from that of other groups. For example, a person might consider that managers should be held to different standards or rules given their

position in the organisation, and as such while the disciplinary procedures are fair to general workers they should be more stringent for managers. Once again this might be particularly pertinent for South African organisations, which are heavily unionised. Union membership provides a salient social ~~identity~~ position for many employees, and support of and loyalty to unions is strong. Members might then assess standards for justice differently among members than non-members – where for example non-members should not be entitled to the same wage increases or benefits negotiated by union leaders, or union membership should be a contributing factor to promotion or choice of work allocation.

Such findings might suggest that notions of interpersonal justice should be extended to incorporate relations beyond those involving just the decision-makers, in the most traditional sense. Research into questions about interpersonal justice have predominantly focused on relations between those with authority and those who are imagined to have no, or less, authority (Lind & Tyler, 1988; Tyler, Degoey, & Smith, 1996, Tyler & Degoey, 1995; Huo, Smith, Tyler & Lind, 1996). There is some indication that other types of relations in the organisation may carry different types of power that can also be influential with regards to people's experience of justice in the workplace. Clearly a more complex and nuanced understanding of work relations and the different types of rewards and benefits that have valence for people needs to be explored in relation to questions of justice.

The cluster analysis thus revealed different sorts of concerns that may emerge for employees within the workplace setting. ~~While t~~These are not necessarily an alternative to the tripartite framework, ~~they~~ but they may help to extend and expand thinking within this model and thus ~~to~~ create a more multi-dimensional understanding of justice. While it is not the aim of

this study to provide a definitive alternative model for exploring perceptions of justice, these results could arguably , in a move towards such a model, be used in a number of ways. Firstly, from the above discussion, four dimensions of justice concerns could be seen to emerge. These are a collective vs individual dimension, a personal concern vs concern for others dimension, a content vs process driven dimension, and a peers vs management dimension. It is not clear that these dimensions represent a 'structure' of justice perceptions, only that they are dimensions along which perceptions of justice appeared to differ. As such there are a number of ways in which they could provide a point of departure for an alternative model of justice perceptions (if in fact such a model is necessary or desirable).

A first option might be to start exploring the existing tripartite model in relation to the four dimensions described above i.e. begin understanding distributive, procedural, and interpersonal justice concerns as manifesting on a collective as well as individual level, in relation to personal concerns as well as concerns for others, in relation to content driven concerns as well as process driven concerns, as well as in relation to relations with peers as opposed to relations with managers. In this way a 4X3 model begins to emerge, where each of the traditional justice dimensions can be understood to be influenced by the complexities of organisational relations. In this way the context begins to assume a more central role in understanding justice perceptions, and a more nunaced understanding of the three justice dimensions can be explored. It is important to note that the four dimensions extracted from the cluster analysis in the current study are only a starting point, emerging from exploratory research using statitistical procedures open to interpretation. Other dimensions or factors will undoubtedly emerge as being central to justice concerns, and as such this is a proposed model, one that requires considerable further exploration.

A second way of using the cluster analysis results towards an alternative model of justice would be to begin a closer examination of how justice perceptions function in relation to each of these dimensions. Exploring the ways in which, for example, perceptions about distributions to collectives differ from those made in relation to individuals, or how concern for others influences perceptions of allocations is an important first step in incorporating these results into an alternative model of justice perceptions. Understanding the subtleties of how these dimensions work will allow us to begin seperating out structural dimensions (i.e. those factors that are essential to the structure of justice) versus those that are moderating or mediating influences.

While an alternative model to the tripartite model does not necessarily completely present itself, i~~I~~t is ~~also~~ clear that the workplace context raises very particular issues and concerns (such as unionisation, centralised decision-making power, access to jobs, training and development, as well as a rigid hierarchy) that might suggest the need for theoretical developments of their own. A model of justice for the organisational setting might look very different to that of social justice, and would have to incorporate a range of context-specific concerns, some of which emerged through the cluster analysis results presented here. This becomes increasingly evident when looking at the cluster analysis results for social justice perceptions.

With regards to the belief in a just world six-cluster solution, there were more areas of overlap than there were for the organisational justice perceptions solutions, indicating that the clusters were not as distinct from one another as in the previous clustering solution. This suggests that the different groups have some similar perceptions, and are distinguished by only a few items. This is further evidenced by the small range of man item scores - even the

highest and lowest scoring clusters (Cluster 3 and Cluster 1 respectively) do not extend much beyond a mean score of 4 or below a mean score of 2.5 for any of the items. Both these characteristics of the clustering solution are an indication that people in this sample held less extreme views in relation to questions about social justice than with regards to organisational justice.

A further feature of this cluster solution is the considerable overlap between the four middle clusters, Clusters 2, 4, 5, and 6. At first glance it appeared that there was a relatively high scoring cluster, a relatively low scoring cluster, and then these three more and somewhat indistinguishable clusters in between. However, a closer inspection revealed that despite the extent of the overlap, there were important points of divergence that made these groups distinguishable from one another in significant ways. This is perhaps a good indication of what might get missed by adding scores up to provide a single index for a variable – these people might have ended up with very similar overall scores, yet they feel differently (sometimes quite strongly) about a range of different issues. This becomes clearer when looking at each cluster.

Cluster 3 comprised the highest scoring people for most of the items in this scale. This cluster was thus seen to comprise people who believe that justice will, for the most part, be done, both at a personal and a broader social level. On the other hand, Cluster 1 clearly comprised people who were, for the most part, fairly low scorers, believing that justice is unlikely to be done, and the world is not a place where each gets his due. Looking at Cluster 2, it can be seen that the items that people in this group felt more strongly about, and thus distinguished this cluster from the other three clusters, related to beliefs about justice that are based on a clear work ethic – those individuals who work hard, be it at school or at work,

will derive the benefits they deserve. As a corollary to this, those who take benefits without working for them (i.e. through crime), will not, in the long run, benefit. Cluster 4 is a mirror image of Cluster 2 in that people in Cluster 4 put less faith in the belief that one's own hard work will be paid off but did have a slightly stronger belief that broader social systems will, in the long run, be fair. As such people in Cluster 4 may be characterised as generally neutral to moderately low scorers, who have less faith in an individual's capacity to influence their own outcomes. Looking at Cluster 5, it can be seen that people in this cluster appeared to not necessarily believe that bad things can happen to people who do not deserve them. However they seemed to feel more strongly about people deserving their own good fortune – i.e. bad things can happen to you at random, but good things result from effort exerted by the person. A second set of related beliefs emerging within this cluster centres on belief at a broader level that, ultimately, good will win out and bad will be punished, both at an individual level and within broader systems. Finally, looking at Cluster 6 it can be seen that people in this group had a general sense that the world is not a fair place – there is no guarantee that anyone will actually get what they deserve. In fact, people in this group seem to quite strongly believe that people might benefit from immoral or unjust actions, such as crime. At the same time, there does not seem to be sense that bad things will happen to people who don't deserve them. As such people in this group seem to believe that while the world is not necessarily a fair place, neither is it unfair.

Like with organisational justice perceptions, the cluster analysis has revealed a number of central concerns and dimensions along which perceptions of social justice may vary. The first theme relates to the question of personal versus larger social systems – family, work, and personal relationships versus society as a whole, political systems and regimes, the prison system, and the judiciary. This echoes some of the organisational justice findings

where a differentiation between collective and individual issues with regards to justice perceptions was made. It was found that people possibly discriminated between those policies, procedures, and practices that affect them individually and those that refer to collective groups in the organisation, such as union members or managers. This is in line with Rawls (1971), who defines the scope of his theory as pertaining specifically to that of social justice, which he differentiates from other justice concerns. While he acknowledges that it is not only laws, institutions, and social systems that can be considered just or unjust, but people, actions, decisions, accusations, even attitudes or traits, he argues that social justice focuses on the basic structure of society, and more specifically on the ways in which the major institutions of society distribute basic rights and duties as well as the benefits resulting from social co-operation. In this way he differentiates social justice from questions about justice in other, possibly smaller, contexts. Similar to belief in a just world, there is an indication that people might judge issues that effect them personally (e.g. getting a lucky break or preventing a heart attack) differently from those that refer to broader social systems that, at most, affect them indirectly (e.g. whether a political candidate gets elected or the larger course of history).

Once again, this cannot be accounted for simply as being about personal self-interest. People still might feel very strongly about issues that do not concern them directly, such as the death penalty, conditions in prison, or the competence of police and judges, but arguably may use different standards, consider different factors, consider the issues more or less frequently, or use different standards of comparison than when considering matters that are more personal to them. Whether I, personally, am subject to just practices or events might mean something different to me from whether broader social systems are just.

A second dimension that emerged as differentiating clusters from one another is closely linked to this first dimension, and refers to the notion of personal agency or control over events. Some groups seem to have a stronger sense of individuals' control over their social world and others adopt a more fatalistic view about justice seeing such matters as being beyond their control or out of their hands (even such matters as preventing a heart attack by staying healthy). Such a distinction can be understood with particular reference to the South African context. The previous government's policy of Apartheid meant that people were treated differently to one another on the basis of quite random characteristics. The injustices that were meted out were undeserved, and individuals were often impotent in the face of the mechanisms adopted to implement such policies. The issue of agency and power thus became central to questions of justice, as there was very little that most individuals could do to influence the way in which they were treated or the way in which the social system was operating. The distinction between situations in which one has the power to influence outcomes (such as at home or in the immediate social environment) and where one does not thus seems an almost natural result of such a history and is likely to have salience for this sample.

Finally, it is important to note that, by looking at profiles of responses, it is clear that people do not necessarily function at two ends of a justice continuum, with justice and injustice being at either pole. Rather people appear to have much more capacity for ambiguity with there being some evidence that while some might believe that people get the justice they may deserve, they don't necessarily believe that they will be the victims of injustice without due warrant. This is further support for the idea that perceptions of social justice and social injustice might operate independently of one another.

The belief in an unjust world cluster analysis offers less insight into the structures of justice perceptions than the previous two analyses. A number of reasons were given for this in the previous chapter, including the fact that the majority of mean item scores fall between 2.5 and 3.5, indicating a sample that is largely undecided or neutral about the issues presented to them, and that often clusters were differentiated from one another by only one or two items, which tended to seem almost random. There were two clusters that stood out as have low or high scorers and that were therefore more easily characterised. - Cluster 4 comprised people who believe that the world can be an unfair place, while Cluster 2 comprised people who do not believe that the world is an unjust place. The remaining clusters were more difficult to define. Clusters 6 and 3 were almost identical, comprising people who were largely neutral or unsure with regards to questions of unfairness in the world, but who did have a clear tendency to disbelieve that unfair things happen. Only one item, that related to good drivers having as much chance of being injured as bad drivers, differentiated these two groups, with this being the only item that people in Cluster 6 strongly agree with, and is one of two items that people in cluster 3 clearly disagree with. People in Cluster 5 were also largely neutral or uncertain regarding the majority of items. The one item that elicited a non-neutral response was item 3, “It is common occurrence for guilty people to get off free in South African courts”, which people in this group agreed with. This was the only group who believes that the South African legal system is failing. Cluster 1 had a wider range of mean item scores and people in this cluster thus arguably held relatively extreme views. People in this cluster seemed to hold the view that people have agency in the good that happens to them, but possibly not in the bad.

As can be seen, then, the issues that differentiated the clusters from one another are not particularly clear indicators of the cluster’s overall character. However, while the clusters for

the belief in an unjust world cluster analysis were more difficult to characterise and define, there are still some of the dimensions emerging here that were discussed earlier in relation to belief in a just world. In particular the question of agency was central in many of the clusters. This is evidenced by the relatively strong reaction by all clusters to the question related to driving ("Careful drivers are just as likely to get hurt in traffic accidents as careless ones"). This is clearly tapping into notions of whether people are able to control what happens to them by how they behave (which would be considered a state of justice, as each is getting their due), or whether good and bad happen randomly (a state of injustice).

A further point of interest to emerge from this final cluster analysis is the importance of particular issues. As mentioned previously, what differentiated many of the clusters from one another were one or two particular concerns such as the state of the South African legal system. These matters do not necessarily have to be representative of or related to a whole set of other issues e.g. if you have low perceptions of the justice system you are also likely to feel XYZ about the prison system. Further, strong feelings about one social issue do not necessarily mean someone is prone to strong feelings about other social issues. As such it might be very difficult for people to assess how fair their society or social world as a whole is. In other words perceptions of social injustice are not necessarily a consistent, and therefore additive, variable as they are arguably issue-driven, and people's opinions vary from issue to issue. Once again, this possibly provides some evidence that perceptions of justice are less personality or trait driven than particular theorists argue (Lerner, 1980).

Similar to that of organisational justice, the cluster analysis results for perceptions of social justice do not necessarily present a complete alternative to the tripartite model, but do present some possible points of departure for such a discussion. Arguably two dimensions

emerge that can be seen to be important adjuncts to the tripartite model, or alternatively the beginnings of an alternative model. The first is the personal versus the social, and the second relates to questions of agency. Once again these two dimensions might not necessarily be indicators of the structure of justice perceptions, but might be moderators or mediators of the relationship between allocations and the perceptions thereof. As such, if they are to be used as a model for understanding perceptions of justice, further research will be required in order to explore the ways in which they function and influence people's experiences of fairness.

All three cluster analyses, but in particular those conducted in relation to organisational justice perceptions and belief in a just world, indicate that a range of concerns underpin perceptions of justice. While the tripartite model of justice is valuable in exploring and understanding particular questions about justice within certain contexts, these findings arguably provide alternative or additional dimensions to explore when postulating about the structure of justice perceptions. Furthermore they are an indication of what issues emerge when justice perceptions are looked at more holistically. This is line with arguments made by Lind (2001) who questions the value in drawing distinctions between types of justice perceptions. He argues that people can distinguish between different types of justice when responding to questionnaire items measuring different types of justice, but that the real impact of justice judgements depends on a more holistic or overall perception. In a similar vein Greenberg (2001), too, argues that people forming perceptions of justice are more likely to be making holistic judgements in response to information that is salient and available, rather than distinguishing between different types of justice dimensions. In this spirit, it is arguably important to begin questioning the value of one model that accounts for the structure of justice perceptions (such as the tripartite model). While some emphasis has been placed on exploring the ways in which the cluster results can provide the basis for an alternative model of justice perceptions, arguably it should not be assumed that

this is either necessary or desirable. Perhaps more emphasis needs to be placed on a return to exploratory research that asks people how they define justice or what they consider when making justice judgements, before attempts are made to find a 'bottom line' model. In this way we can begin asking whether such a model – one that accounts for the structure of justice across contexts, countries, and cultures - is even possible.

In this way the cluster analysis results should perhaps be understood as a turn of the kaleidoscope – an attempt to change the way in which patterns are looked at – in order to allow for the possibility of asking different types of questions. These clusters also provide more nuanced and detailed insight into perceptions of justice, and account for differences between people that otherwise would have been flattened out by the reduction of individual scores into one score. While this is a valuable exercise in and of itself, it also provided the point of departure for the CHAID analysis, which aimed at exploring the final research question under consideration. The results of this analysis will be discussed next.

Demographics as predictors of Justice Perceptions

The final question under investigation in the current study looked at the relationship between demographic variables and experiences of justice, and asked whether these demographic variables were determinants of experiences of organisational and social justice. To this end, a wide range of biographic, work, financial, and religious demographic variables were collected through the use of a demographic blank. These were then analysed in order to explore which of these demographic variables emerged as being more significant in terms of predicting peoples' experiences of justice as well as how these demographic variables interacted with one another in predicting experiences of justice. The cluster analyses formed

the first step in this investigation, as justice perceptions were not considered in terms of one total score index, but rather in relation to profiles of responses. As such the study explored whether demographic variables were determinants of cluster membership, i.e. whether groups of people who hold similar social justice perceptions can be characterised by similarities in demographic variables. A CHAID analysis, a technique used for the classification of data by evaluating complex interactions among predictors and partitioning data into mutually exclusive, exhaustive groupings that best describe the dependent variable (Kass, 1980), was used in order to answer these questions.

Before looking at the decision tree resulting from the CHAID analysis, it would perhaps be useful to discuss the demographic variables that formed the basis of the node splits. In this way an overview of which demographic variables were found to be more significant in predicting different justice perceptions can be looked at, before a closer analysis of how these impacted on cluster membership is conducted.

Starting with the analysis of organisational justice perceptions, it is important to note that the predictors identified by the CHAID comprised a mixture of employment related and biographic, financial, and religious demographic variables. This is an indication that factors external to the workplace impact on organisational justice perceptions. For example in the first branch of the organisational justice decision tree, age and religious affiliation were identified as predictors quite high up in the decision tree hierarchy, indicating that they are relatively strong predictors of organisational justice perceptions. Religion also featured as an important determinant of organisational justice perceptions in the second branch, as did the domestic variable related to the number of people living with respondent in his/her domicile. All of these variables point to the importance of personal circumstance and beliefs

in impacting on workplace justice perceptions. This has important implications for organisations in that it means there are factors beyond their control impacting on how people receive organisational decisions and procedures. Justice perceptions therefore have to be understood as a part of a larger set of experiences, attitudes and beliefs; and attempts to influence organisational justice perceptions need to incorporate this understanding.

This might seem contrary to previous findings, which have provided evidence for a clear distinction between different spheres of justice. There is however a clear indication that a more holistic approach – one that does not view these spheres or contexts in isolation from one another - is needed. This is in line with Campbell (1998), who argues that there is a danger is distinguishing too much between spheres. He says that we can work from a basis of understanding that distributions in different spheres need not be identical, while still considering the overlaps and commonalties behind the determinants of justice in each sphere.

Further to this, the CHAID results arguably provide some evidence for the complexity that exists in relation to organisational justice perceptions and work place demographics. The variable that emerged as being the best determinant of justice perceptions, namely job title, is illustrative of this complexity. At first it might seem surprising that other variables such as gender, race or salary were not the strongest determinants of organisational justice perceptions, given the importance these factors have for people working in South African organisations and the salience they have within the larger societal discourse. However, it can be argued that job title is perhaps one arena where these and many other variables become inextricably interlinked. Job title is not only an indicator of the type of work a person does, it is also has implications for factors such as salary, organisational status, power, level of education, and autonomy. These factors in turn have an impact on employees' broader social

life and demographic pattern. For example, salary influences financial status and social class which affects where a person lives, under what conditions, how many dependants they are able to support and for what reasons, and so on.

Also significant is that job title is likely to be race and gender inflected, particularly in a country such as South Africa, which has a long but recent history of job reservation for whites as well as preferential hiring of men. This is evidenced by employment equity laws that make affirmative action policies targeted at blacks, coloureds, Indians, and women a legal imperative for organisations. Despite the existence of such laws, job titles in South Africa have quite distinct race profiles. For example, within the current sample, of the 35 managerial staff, 20 were white men and only 8 were women. Only 3 managers were black. Similarly out of the 37 laboratory staff only 5 were women. On the other hand the vast majority of the human resources staff were women (8 out of the 9). Out of the 162 general factory staff, only 6 were white. Clearly job title is also very closely linked to race and gender, as well as a range of other variables. Given the complexity and the importance of job title, it is unsurprising that it emerged as such a strong determinant of organisational justice perceptions. Once again there is a clear indication that these variables cannot be seen in isolation from one another.

While it is important to note which demographic variables emerged as determinants of organisational justice perceptions, it is arguably as valuable to note which did not feature in the classification tree. As discussed in Chapter 4, there are a number of identity components that have been argued by social psychologists to carry 'master status' – that is this component will dominate all other components in nearly all social situations. These include among others, race, gender, and class (Jaret & Reitzes, 1999). These variables have

received considerable attention from researchers and are viewed as being central to questions of justice (for reviews of this research see Chapter 4). Despite the perceived centrality of these variables, race and gender were not identified as predictors at any level in the organisational justice classification tree, not only in relation to job title.

This means that they were not identified by the CHAID process as being particularly strong predictors of workplace justice perceptions, and that other variables had a stronger bearing on such perceptions. This is perhaps evidence of what can be considered an over emphasis on these particular individual characteristics without any reference to other variables that may be closely linked to such characteristics. As was argued in Chapter 4 as well as in the preceding paragraph, this may lead to a spurious connection being made between variables. For example the variable of race may actually be picking up on issues related to financial status or job title, particularly in the South African context where groups of people were disadvantaged on the basis of race, and are still experiencing the repercussions of this disadvantage, financially and socially. The fact that the CHAID analysis picked up on a range of other variables but not on race, is an indicator that it was not a strong determinant of justice perceptions, but that other related variables, such as job title, financial indicators, and domestic conditions, were.

This is further evidenced by the competing splits tree. Where race was a potential predictor of organisational justice perceptions, union membership and job title proved to be stronger determinants. This is perhaps unsurprising in that both of these variables have strong racial foundations, particularly within a South African context. There is still a race imbalance in terms of the types of jobs people do, largely because of Apartheid education policies that have left black, Indian and coloured people at a disadvantage. Further, the union movement

in South Africa is also somewhat racially divided. Certain unions, particularly those that cater to 'blue collar' workers, have a very strong support base among black workers, largely because of the role they played in opposing the Apartheid government. However trade unions – those unions that cater to people in trades such plumbing, electrical works, boiler makers - have a largely white support base, as it is these jobs that historically were occupied by white employees, but that needed 'protection' from black, cheaper labour. As such while race might be a significant determinant of justice perceptions, the results of the CHAID are indicating that it is not necessarily because of race in and of itself, but rather because of a related set of financial and social issues.

As mentioned earlier, gender and salary, two variables that have received a lot of attention from justice researchers (as can be seen in chapters 2, 3, and 4), did not appear in the classification tree, and nor did they appear in the competing splits tree. This implies that they did not emerge as determinants of organisational justice perceptions at all. There were other financial indicators, such as whether someone had investments, the number of dependants a person had, and whether they were members of a medical aid or pension fund. There is, therefore, an indication that it is not salary that has particular salience for people, but rather what it is they are able to do with their money and how much disposable income they have. This provides some evidence for Sen's (1999) assertion that there are many factors that effect the extent of the utility or range of opportunities one may get from a particular distribution. As discussed in Chapter 4, Sen (1999) argues that two people with exactly the same amount of money but who operate in varying contexts will get a different degree of benefit from that money. As such he contends that justice cannot be understood by focussing only on the end state distribution. Once again this has important implications for organisational justice researchers, who have emphasised salary as being an important aspect

of justice perceptions. There is a clear indication that this is a more complex issue, influenced by personal circumstances.

The CHAID diagrams also reveal some important information about the impact of demographic variables on justice perceptions. Firstly, the results challenge the perceived homogeneity of groups both in organisations and more broadly. For example union members have often been considered as one group, with no consideration being given to the differences that may lie within different factions, or Christians have also often been seen as one group versus other religious groups, with no consideration being given to denominational differences. As can be seen from the CHAID results splits were made in quite complex and unpredictable ways, indicating that within group differences are important determinants of organisational justice perceptions, and that the homogeneity of large, complex groups cannot be assumed.

Further to this divisions were also made in quite unforeseen ways, challenging assumptions that underpin our understanding of demographic variables. For example, the main split was made on the basis of job title, which has often been associated with organisational hierarchy. The CHAID, however, split job titles on the basis of the type of work people do, with there being a mix of hierarchies in each group. For example, supervisors fell into a different group from managers despite the fact that they have more authority than general workers with whom they were grouped. Further, technical staff members (such as engineers and electricians) were also classified with general factory workers and supervisors despite being of a different skill and education level. Given this, these results encourage a more complex understanding of demographic groupings and the ways in which these influence justice perceptions.

The organisational justice CHAID results also emphasises the importance of considering how demographic variables interact with one another. For example, in a country like South Africa it seems logical that job title, particularly on the basis of the nature of work being done, would interact with age and union membership in relation to justice perceptions. This country has a unique history that has deeply impacted on individuals, organisations, and institutions alike. As mentioned previously unions have played an important role in that history and in the fight against Apartheid. Further to this, there are generational differences in terms of how Apartheid was understood and experienced, for example some younger people benefiting from attempted redress and older people only experiencing the negative discrimination, or older people having made more sacrifices than younger ones. The hierarchy of splits that emerged from the CHAID created a logical interaction of variables that provided a holistic picture of how demographic variables impact on justice perceptions.

Further by accounting for the interactions between demographic variables the CHAID highlighted the ways in which justice concerns can differ between groups. The two main branches of the CHAID tree differed quite substantially in terms of justice perceptions. For the most part people in the first branch i.e. general factory workers, supervisors, and technical staff tended to belong to clusters that held more negative justice perceptions, while the opposite was true for the second branch. Within these branches however, there were important shifts in emphasis, with different concerns emerging for different sub-groupings. For example within different groupings in the first branch collective concerns emerged as central, while for other sub groups individual concerns were highlighted. Within the second branch distributive and individual benefit issues emerged quite strongly. Once again this

emphasises the benefits of departing from more ossified understandings of justice perceptions as well as for the importance of accounting for demographic complexity.

Moving onto the belief in a just world CHAID results, an overview of the demographic variables in the hierarchy shows that, like with organisational justice perceptions, a range of variables from different spheres of life emerged as determinants of social justice perceptions. The best determinant of social justice perceptions was religious affiliation, obviously a variable that has a strong bearing on how people perceive right and wrong action. However other factors such as job title, the area in which people live, as well as factors related to financial status and health all emerged as being related to experiences of social justice. Once again this is a clear indication that different contexts do not stand in isolation to one another. While there are indications that organisational justice perceptions are somewhat independent of social justice perceptions there is also clearly important overlap between them. What happens to a person within the work context has an important bearing on how he/she experiences other contexts. Once again this is in line with arguments made by Campbell (1998), which state that while we must be aware of how justice operates within different spheres, so too should we consider the overlaps and commonalties behind the determinants of justice in each sphere. Any understanding of justice perceptions has to account for this type of reciprocity, and an account of justice that does not can arguably be considered limited in its value. While it is, therefore, important to look at the different ways in which justice operates within different contexts, an overly bounded or isolationist view prevents a more realistic understanding of the variable.

As with the organisational justice CHAID results, gender and race do not appear anywhere in the decision tree, and low down in the competing splits diagram, indicating that they were

not important determinants of social justice perceptions and that other demographic variables were more central. Again, some of these variables such as ones related to financial status might be race and gender inflected, but others such as area or some of the health related variables are not. The importance of looking beyond these two variables is once again highlighted – this is not to say that their impact and importance for people is over estimated, but that they work in conjunction with and in relation to other variables that have considerable valence and salience for people. Thus looking at race or gender alone will not necessarily add much insight into the impact of demographic variables on attitudes, perceptions and experiences. Further to this, it is important to note that while a number of financially related variables came up in the decision tree, salary was not one of them. Again this is perhaps an indication that salary has been over emphasised as a marker of financial status. For example whether people owned a fridge features relatively high up in the decision hierarchy. As was mentioned in the previous chapter, this might seem slightly odd at first, but it is possibly an indicator not only of the possession itself, but of the standard of life a person or family has. Once again this relates back to Sen's (1999) arguments that link what someone *is able to do* with the distributions they are given to the notion of justice.

As discussed in Chapter 6, the belief in an unjust world CHAID was more difficult to interpret than the previous two. The first reason for this is because the cluster analysis itself was not particularly meaningful (as discussed in Chapter 6) and, therefore, associating the demographic determinants with a set of clear and explicit set of justice perceptions was affected. In other words, if the justice perceptions are not expressively defined then it becomes unclear what the demographic variables are determining. A second reason for the difficulty in interpreting the results relates to the fact that there were not always very clear or discernible patterns of cluster affiliation. It was, therefore, not always possible to determine

where the differences between the groups actually lay. A final reason for the difficulty in interpreting the results is the fact that the demographic groupings were not always easy to account for as there were often no apparent reasons for the variables to group in the way that they did.

While this CHAID was more limited in its value than the previous two, it did also highlight some of the points mentioned above. Similar to the belief in a just world analysis, some unlikely variables were determined by the CHAID to be predictors of perceptions of social injustice. These included variables such as whether the respondent or any of his/her dependants had required hospitalisation in the past two years, or whether they prayed while not at their place of worship. Once again these variables were understood to be indicators of quite complex sets of circumstances, and a source of insight into peoples' experiences. On their own they might seem quite random, but read in relation to the other demographic variables with which they are interacting, they can possibly be understood as more refined facets of the larger picture. Once again this is a possible indication that demographic variables need to be understood in a more holistic, integrative way, rather than as isolated characteristics that have a consistent impact on the people belonging to a particular grouping.

A second point relates to the way in which the CHAID grouped the various demographic variables, as this was often indicative of the complexity of within group differences and highlighted the importance of and the way in which categories are used to describe such differences. For example the variable that related to the number of dependants a respondent had emerged four times in the decision hierarchy, each time being split in different ways. Sometimes the groupings emphasised people on the very extreme sides of the continuum

(i.e. having only 1 dependant or having 10 dependants), while at other times the groupings were less extreme with each category incorporating larger ranges. Similar patterns occurred with variables such as job and organisational tenure, and even in relation to religious affiliation and job title. As was discussed in Chapter 6, the way in which these variables were grouped varied from CHAID to CHAID as well as within one CHAID. While this did make the belief in an unjust world CHAID more difficult to understand, it is arguably an indication that the way in which we understand the impact of demographic variables need not remain consistent, and need not be confined to static categories. For example, under a particular set of circumstances Catholicism might have more in common with Islam than with other Christian religions, while in other contexts the opposite may be true. This illustrates the way in which reducing information (e.g. grouping all Christian religions together, or categorising tenure into short, medium, and long-term) might limit our understanding of the way in which variables impact on one another.

In general the three CHAID analyses were arguably most valuable when looking at which demographic variables were selected as the best determinants of justice perceptions, and the ways in which these were split and grouped. Clearly demographic variables are important indicators of social position, which in turn plays an important role in determining experiences of justice. While the results of these point to the relevance of demographic variables as determinants of justice perceptions, these results, along with all of the others conducted in this study, need to be considered in light of the limitations of the study. Such limitations will be discussed in the following section.

Limitations of the Study

There are a number of factors that need to be taken into account in relation to the significance and generalisability of the results of the current research. These relate to issues about the measuring instruments used, the sample, data collection methods, as well as the statistical analyses used.

The first set of concerns relates to the measuring instruments used in the study, with particular reference to the belief in a just world scale and the demographic blank. The belief in a just world measure was used in order to assess perceptions of social justice. Initially this seemed like an appropriate measure to use as the scale comprises a series of statements about different aspects of the social world, and asks respondents about the extent of their agreement with these statements. The items relate to a range of different concerns, from personal matters to more broad-based issues. As such it seems plausible that such a scale would be useful in assessing perceptions of social justice. Despite this the scale proved to have a very low reliability, and as such was ultimately split into two different sub-scales. While this is not problematic in itself, as the sub-scales appeared to shed some light on the structure of social justice perceptions, it does raise some questions about the usefulness of this measure as it stands. Arguably a scale that was specifically designed to measure perceptions of justice would have been more appropriate for the current study, particularly one that was more suitable to a South African sample as well as one that looked at notions of social justice more specifically. For example, such a measure might include questions about health care, public transport, the education system, attempts at redress, as well as matters such as HIV/AIDS, all of which have particular importance within the South African context. Further, questions that seemed less significant, such as those related to whether children deserve punishment or students get the grades they deserve, could have been

excluded from the study. So while the belief in a just world scale was an adequate measure, particularly in light of the steps taken to address the low reliability, another instrument might have yielded a better understanding of social justice profiles in South Africa.

Further to this, some theorists might insist that Belief in a Just World is a personality trait, and as such using that scale to measure social justice perceptions is conceptually flawed. Again, while this is countered by the fact that the questions were never used as a psychometric scale, it does give further weight to the need for a measure of social justice perceptions that does not rely on the tripartite framework described in the first half of this thesis.

The second measuring instrument that raised some limitations was that of the demographic blank. While it was the aim of this study to avoid reductionism in the measurement of variables, particularly the demographic variables, arguably there were a number of questions that could have been merged with others or even clustered themselves in order to provide a more cohesive profile of the respondents. Individual questions, while useful in forming a picture of a respondent, could become less meaningful in isolation. As such the demographic profiles could possibly have undergone some preliminary analyses to assist a more meaningful understanding, or alternatively fewer, more strategic questions could have been asked in order to elicit more critical demographic information from respondents.

Finally, the new global organisational justice scale also presents some limitations. While it was an attempt to develop a measure of justice that does not rely on the

tripartite framework, more work needs to be done on the scale to ensure that it actually does this. In other words it is not clear the ways in which this scale differs from the tripartite scales, or if it does so in a sufficiently meaningfully way. Once again, while this cannot be considered a fatal flaw of the research as the statistical tools used do not make use of scales per se, but rather individual items, a different set of questions might have yielded more theoretically relevant results.

A second set of concerns relates to the nature of the sample used in this study. Questions related to organisational and social justice are arguably sensitive ones, particularly in South Africa where a certain degree of hostility and mistrust exists between various groups on the basis of such perceptions. Many workers do not trust management to treat them fairly, and they are often worried about expressing their concerns in writing, despite the guarantee of confidentiality. With regards to social justice perceptions, the need to be politically correct often restricts what people are prepared to admit to or to discuss. Thus, while the sample was representative of the organisation, it may not necessarily be representative of the full range of attitudes to and perceptions about the organisation or society as a whole. Arguably people with very extreme views might have been reticent to commit their views to paper or to participate in the study at all. As such employees who did not participate in the study may have been able to provide the researcher with additional important information pertaining to justice perceptions.

A further limitation of this study is the different means of data collection used. Due to the diversity of the sample, geographically, in literacy levels, and in language, several different methods of data collection had to be used. The method used to collect information may impact on the data yielded (Anastasi, 1976). If only one method of data collection is used,

the effects of that method are controlled for. Due to the number of methods utilised in the present study, it was not possible to control for the different impacts these methods may have had on responses. A further limitation of the data collection involves the reliance on self-report data. While this is an easy and time effective method to use, there may have been biases in individual responses. Rosenthal and Rosnow (1991) describe what they term the good subject effect, where respondents may provide answers they feel the researcher or company would want to find. Social desirability bias may have caused respondents to try and present themselves in a favourable light. There also may have been a tendency for respondents to respond all positively or all negatively to items.

While the statistical procedures used were carefully selected in order to maximise the amount of data use and thus account for some of the complexities of the variables under investigation, these may have raised some related concerns. As can be seen by both the results and the discussion (Chapters 6 and 7 respectively) a certain amount of qualitative analysis is used in order to interpret the results of both the cluster and CHAID analyses. Unlike many other statistical procedures there is no clear indication of significant vs. non-significant results, and many of those kinds of decisions are left up to the researcher to make. For example the researcher deduces how many clusters to retain from the cluster analysis. While these decisions are made on the basis of statistical evidence, there is a degree of subjectivity involved in the data interpretation. While this can also be seen as a strength of the analysis tools, it also raises the limitations of subjectivity.

Another concern related to the statistical tools used refers to the micro level at which the analysis took place i.e. the extent to which the analysis immerses itself in the detail of the data. Again, while this was one of the key reasons such tools were selected (in order to avoid

a reductionistic approach), it does come with some concomitant limitations, namely a difficulty in reaching any 'bottom line' conclusions. This does limit the immediate utility of the results in that they do not, for example present an alternative model for the structure of justice, or of the relationship between demographic variables and perceptions of justice. Rather they present an alternative view of patterns of experiences. Further, a move away from reducing data does leave the researcher and the reader with the complexity of having to navigate a dense set of results making an overview of the results difficult to obtain.

At a theoretical level the above limitation has some important consequences, namely that while an argument has been made for the limitations of the tripartite model, no alternative model is suggested. Arguably this effectively eliminates the only useful framework that exists for analysis, and does not provide another such framework, making analysis difficult. This is perhaps reflected in the measuring instruments used (which had to be improvised as they could not be based on existing understandings of justice), as well as in the difficulty in drawing any concrete conclusions towards such a model. This research is very exploratory in nature, and is thus arguably more of an intellectual exercise aimed at shifting understandings of justice and creating new points of departure for further investigation rather than being able to provide a new and complete alternative model.

Directions for Future Research

As with much research, the current study raises more questions than it does answers, indicating a number of directions for future research.

The results of this study indicated that justice perceptions potentially operate differently within different settings. While much emphasis has been placed on looking at organisational justice perceptions as something separate from social justice perceptions, this notion warrants further investigation with more emphasis being placed on the difference between workplace perceptions and those related to other contexts. Questions about how antecedents and outcomes of justice perceptions may differ need attention, as does research into the relative importance such perceptions have. The extent of the differences between such contexts also warrants investigation. Further to this other contexts should also be explored in relation to their impact on justice perceptions and judgements. Such contexts might include schools and universities, prisons, families and social unions, hospitals, and welfare institutions. In general questions about context and justice perceptions need to be empirically explored both to support the direction research has already taken as well as to direct future investigations.

Another set of results that has implications for future research is those related to the structure of justice. The cluster analysis indicated some justice dimensions around which people aggregated. As discussed these dimensions are not intended as an alternate model of the structure of justice perceptions. Rather they simply provide some alternative points of departure for exploring justice perceptions. These dimensions warrant further exploration both in the work place but in other contexts as well. Further to this studies that do not assume the tripartite justice model as their point

of departure are needed in order to further explore other dimensions or themes related to experiences of justice that can add to our understanding of this variable. To this end research that incorporates more qualitative data collection and analysis methods are called for. Such methods will allow researchers to more fully explore the ways in which people experience exchanges as well as make justice judgements, and thus move away from a purely a priori understanding of these matters.

Additional research is required to explore more adequately the relationship between demographic variables and justice perceptions. There are a number of ways in which this can be done. Ways of refining demographic profiles (without becoming overly reductionist) are needed, preferably on the basis of additional exploratory research. To this end, research that more adequately explores demographic variables in themselves, as well as their relationship to each other, are needed. Possibly different sub sets of demographic variables (e.g. financial or domestic) can be used on their own in order to explore different areas more in depth. More specifically, two sets of variables raised sets of particular questions, namely religious affiliation and job title. These two variables emerged as relatively important in all of the CHAIDS, and arguably warrant particular investigation.

More generally, despite its significance for the South African context, social-psychological research on justice issues in this country is lacking. Many organisations and societal institutions are in a process of transition, and insight into the psychological dimensions of justice can facilitate the more effective and acceptable development of appropriate policies and procedures. The psychological study of justice needs to become more relevant to the South African context. For example research into the experiences of lower level employees

is essential, if we are to move away from a managerial definition of organisational justice. Further to this the impact that unions have on people's experiences of justice as well as their reactions to organisational life is also needed. At a broader level research that looks at the impact of Apartheid on the way in which people experience justice now is essential, as are studies that explore the impact of some of our more pressing social problems on experiences and perceptions of justice. Both qualitative and quantitative research could be beneficial in these areas. Quantitative research can provide insight into the relationships between justice perceptions and other relevant outcome variables. In relation to this, the development and validation of South African scales to measure justice perceptions is needed in order to establish means of accurately assessing these perceptions. Qualitative research could provide more in depth information about experiences of justice as well as the way in which people define and think about justice. Such studies would facilitate a more appropriate understanding of justice within the South African context and would be an essential first step in the development of further research questions as well as the development of measuring instruments.

Conclusion

This chapter has focussed on discussing the results of the statistical analyses presented in Chapter 6. These analyses were conducted in an attempt to address some concerns related to the relationship between different types of justice as well as the relationship between demographic variables (as indicators of ~~identity and~~ social position) and perceptions of justice raised in the first half of this report. Three research questions emerged from these concerns. The first pertained to the interface between different 'types' of justice, in the case of this study, that of organisational and social justice, and asked whether people's

experiences of organisational justice were related to their experiences of social justice. As was discussed in this chapter, these different justice perceptions were not strongly related to each other indicating that they possibly function differently within different contexts. Despite this there was additional evidence to argue that different contexts cannot be seen in isolation from another, and that a more integrative or reciprocal approach to understanding different justice perceptions needs to be adopted.

The second research question referred to similarities in experiences of justice and asked in what ways people clustered together in relation to their experiences of justice. This was particularly important given that the structure of justice perceptions was not assumed in the current study, and as such exploring alternate dimensions of justice concerns that might emerge was central. The cluster analysis results demonstrated that a range of key concerns differentiated groups from another, including collective versus individual concerns, personal versus impersonal events, as well as concerns related to the different types of relationships that exist.

Finally, the last question looked at the relationship between demographic variables and experiences of justice, asked whether demographic variables determine experiences of organisational and social justice. The CHAID analysis shed some light on which demographic variables were the best determinants of social and organisational justice perceptions, and the ways in which demographic variables interacted with one another in relation to peoples' experiences of justice. This chapter was concluded with a discussion of the limitations of this research as well as the implications the current study has for future research.

As was mentioned earlier in this chapter, in many ways this study has raised more questions than it has answered. Arguably this is true of most studies of justice. Campbell (1998, p.2) states, " Indeed, because the concept of justice is so prevalent, and so contested, there is little prospect of presenting any reasonably specific analysis of justice which will find general acceptance..." (Campbell, 1998, p2). Instead of answering specific questions definitively, perhaps this investigation provides an alternative way of looking at and understanding justice perceptions and their relationship to individual experiences.

Chapter 8: References

Adams, J. S. (1963). Toward an understanding of equity. *Journal of Abnormal Psychology*, 67, 5, 422-436.

Adams, J. S. (1965). Inequity in social exchange. In Berkowitz L. (Ed.), *Advances in Experimental Social Psychology (Vol. 2).* New York: Academic Press.

Adams J S & Freedman S. (1976). Equity revisited: comments and annotated bibliography. In Berkowitz L. & Walster L. (Eds.) *Advances in Experimental Social Psychology*. New York: Academic Press.

Adams, J. S. & Jacobsen, P.R . (1964). Effects of Wage Inequities on Work Quality, *Journal of Abnormal and Social Psychology,* 69, 1, 19-25.

Adams, J. S. & Rosenbaum, W.B. (1962). The Relationship of Worker Productivity to Cognitive Dissonance about Wage Inequities. *Journal of Applied Psychology* 46, 3, 161-64.

Afzalur, R.M (2000). Do justice perceptions influence styles of handling conflict with supervisors? What justice perceptions precisely? *International Journal of Conflict Management*. 11, 1, 9-23.

Ahmed, S.M. & Stewart, R.A. (1985). Factor analytical and correlational study of just world scale. *Perceptual and Motor Skills*, 60, 135-140.

Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster analysis*. Beverly Hills: SAGE Publications.

Alexander, S. & Ruderman, M. (1987). The role of procedural justice and distributive justice in organisational behaviour. *Social Justice Research*, 1, 177-198.

Allport, G. W. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart and Winston.

Ambrose, M. L., Harland, H. K., & Kulik, C. T. (1991). Influence of social comparisons on perceptions of organisational fairness. *Journal of Applied Psychology,* 76, 92, 239-246.

Ambrosio, A. L., & Sheehan, E. P. (1986). Factor analysis on the just world scale. *Journal of Social Psychology*, 130, 3, 413–415.

Anastasi, A. (1976). *Psychological testing* (4th ed). New York: MacMillan Publishing Company.

Ang, S., Van Dyne, L., & Begley, T. M. (2003). The employment relationships of foreign workers versus local employees: A field study of organizational justice, job satisfaction, and OCB. *Journal of Organizational Behavior*, 24, 561-583.

Aquino, K., Lewis, M.U, & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organization Behavior*, 20, 1073-1091.

Arthur, J. & Shaw, W.H. (1992). *Justice and Economic Distribution (2nd Edition).* Prentice Hall: New Jersey.

Audi, R. (Ed) (2001). *The Cambridge Dictionary of Philosophy*. Cambridge University Press: U.S.A.

Austin, W. & Walster, E. (1974). Reactions to confirmations and disconfirmations of expectancies of equity and inequity. *Journal of Personality and Social Psychology,* 30, 208-216.

Babbie E. (1998). The *Practice of Social Research (8th edition*). London :Wadsworth Publishing Company.

Ball, G. A., Trevino, L. K., & Sims, H. P. (1994). Just and unjust punishment: Influence on subordinate performance and citizenship. *Academy of Management Journal*, 37, 32, 299-322.

Barret-Howard, E., & Tyler, T. R. (1986). Procedural justice as a criterion in allocation decisions. *Journal of Personality and Social Psychology*, 50, 2, 296-304.

Barry, B. (1973). *The liberal theory of justice: A critical examination of the principal doctrines in* A Theory of Justice *by John Rawls*. Oxford: Clarendon Press

Bartle, S. A., & Hays, B. C. (1999). *Organizational justice and work outcomes: A meta-analysis*. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Atlanta, GA.

Beal, C., Garrod, A**.**, Ruben, K., Stewart, T., and Dekle, D. (1997). Children's Moral Orientation: does the gender of dilemma character make a difference? *Journal of Moral Education, 26*, 1, 45-58

Beugré, C. D., & Baron, R. A. (2001). Assessing systemic justice: The role of distributive, procedural, and interactional justice**.** Journal *of Applied Social Psychology*, 31, 2, 324-339.

Benson, D.E.(1992). Why do people believe in a just world? Testing explanations. S*ociological Spectrum*, 12, 73-104

Bhagat, R. S., & McQuaid, S. J. (1982). Role of subjective culture in organisations: A review of directions for future research. *Journal of Applied Psychology*, 67, 653-685.

Bies, R. 1989. Managing conflict before it happens: The role of accounts. In M. A. Rahim (Ed.) *Managing Conflict: An Interdisciplinary Approach*. New York: Praeger.

Bies, R.J. (1987).The predicament of injustice: The management of moral outrage. In Cummings L.L. & Staw B.M. (Eds.), *Research in organizational behaviour,* Vol. 9. Greenwich, CT: JAI Press.

Bies, R. J. (2001). Interactional (in)justice: The sacred and the profane. In Greenberg, J.and Cropanzano, R. (Eds.), *Advances in organizational justice,* Stanford, CA: Stanford University Press.

Bies, R.J. & Shapiro, D.L. (1988). Voice and Justification: Their Influence on Procedural Fairness Judgements. *Academy of Management Journal*, 31, 3, 676-685.

Blader, S. L., Chang, C. C., & Tyler, T. R. (2001). Procedural justice and retaliation in organizations: Comparing cross-nationally the importance of fair group processes. *International Journal of Conflict Management*, 12, 295-311

Bobocel, D. R., Davey, L. M., Son Hing, L. S., & Zanna, M. P. (2001). The concern for justice: Cause or rationalisation? In Cropanzano, R. (Ed.), *Justice in the workplace: From theory to practice*. New Jersey: Laurence Erlbaum Associates.

Bobocel, D. R., McCline, R. L., & Folger, R. (1997). Letting them down gently: Conceptual advances in explaining controversial organisational policies. In Cooper, C. L. & Rousseau, D. M. (Eds.), *Trends in organisational behaviour*, Vol. 4.New York: Wiley.

Bond, D. & Park, J.C. (1991). An Empirical Test of Rawl's Theory of Justice. *Simulation and Gaming*, 22, 443-462.

Brickman, P. (1977) Preference for Inequality, *Sociometry* 40, 303-310.

Brockner, J., DeWitt, R.L., Grover, S. & Reed, T. (1990). When it is especially important to explain why: Factors affecting the relationship between manager's explanations of a layoff and survivors reactions to the layoff. *Journal of Experimental Social Psychology, 26*, 389-407.

Brockner, J., & Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: interactive effects of outcomes and procedures. *Psychological Bulletin*, 120 (2), 189-208.

Campbell, Tom (1998). What Justice is About. In Jones, E. & Weale, A. (eds.) *Justice.* London: Macmillan.

Cascio, W. F. & Bailey, E. (1995). International human resource management: The state of research and practice. In Shenkar, O. (Ed.), *Global perspectives of human resource management*. New Jersey: Prentice Hall.

Cassidy, C. & Trew, K. (1998). Identities in Northern Ireland: A multidimensional approach. *Journal of Social Issues*, 54, 4, 725-740.

Cattell, R (1978). *The scientific use of factor analysis*. Plenum: New York.

Cohen, R. L. (1991). Membership, intergroup relations, and justice. In Vermunt, R & Steensma, H.(Eds.), *Social justice in human relations Vol. 1*. New York: Plenum.

Cohen-Charash, Y. & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes, 86,* 278-321.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86,* 386-400.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research *Journal of Applied Psychology, 86,* 425-445.

Cowherd, D. M., & Levine, D. I. (1992). Product quality and pay equity between lower-level employees and top management: an investigation of distributive justice theory. *Administrative Science Quarterly,* 37, 302-320.

Crandall, C. S., Tsang, J. A., Goldman, S., & Pennington, J. T. (1999). Newsworthy moral dilemmas: Justice, caring, and gender. *Sex Roles*, 40, 187-209.

Cropanzano, R. & Greenberg, J. (1997). Progress in organisational justice: Tunnelling through the maze. In Cooper, C. L. & Robertson, I. T. (Eds.), *International Review of Industrial and Organisational Psychology*. New York: Wiley

Cropanzano, R. (2001). *Justice in the workplace (Volume 2): From theory to practice*. New Jersey: Lawrence Erlbaum and Associates.

Cropanzano, R, Byrne, Z.S., Bobocel, D.R, Rupp, D.E. (2001). Moral Virtues, Fairness Heuristics, Social Entities, and Other Denizens of Organizational Justice, *Journal of Vocational Behavior,* 58, 164–209

Crozier, S., & Joseph, S. (1997). Religiosity and sphere-specific just world beliefs in 16- to 18- years olds. *Journal of Social Psychology,* 137, 4, 510-513

Dailey, R.C. & Kirk, D.J. (1992). Distributive and Procedural Justice as Antecedents of Job Dissatisfaction and Intent to Turnover. *Human Relations*, 45, 3, 305-316.

Day, D.V., Cross, W.E., Ringseis, E.L. & Williams, T.L. (1999). Self-categorisation and identity construction associated with managing diversity. *Journal of Vocational Behaviour*, 54, 188-195.

DeMore, S. W., Fisher, J. D., & Baron, R. M. (1988). The equity-control model as a predictor of vandalism among college students. *Journal of Applied Psychology*, 18, 1, 80-91.

Deutsch, M. (1975). Equity, equality and need: What determines which one will be used as the basis for distributive justice? *U. S. Journal of Social Issues*, 31, 3, 137-149.

Deutsch, M. (1985). *Distributive justice: a social-psychological perspective*. London: Dale University Press.

Dorfman, P. W., Howell, J. P. (1998). Dimensions of national culture and effective leadership patterns: Hofstede revisited. In Farmer, R.N. & McGoun, E.C. (Eds.), *Advances in International Comparative Management*,

Eyde, L.D. & Quaintance, M.K. (1988). Ethical issues and cases in the practice of personnel psychology. *Professional Psychology: Research and Practice,* 19, 2, 148-154.

Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.

Fitzgerald, M.R (2003). Organizational cynicism: It's relationship to perceived organizational injustice and explanatory style. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64.*

Folger, R. (1977). Distributive and procedural justice: Combined impact of voice and improvement on experienced inequity. *Journal of Personality and Social Psychology*, 35, 2, 108-119.

Folger, R. (1998). Fairness as a moral virtue. In Schminke, M. (Ed.), Managerial ethics: Moral management of people and processes. New Jersey: Erlbaum.

Folger, R., & Cropanzano, R. (2001). Fairness theory: Justice as accountability. In Greenberg, J. & Cropanzano, R. (Eds.), *Advances in organizational justice*. Stanford, CA: Stanford University Press.

Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115-130.

Frable, D.E.S. (1997). Gender, racial, ethnic, sexual, and class identities. *Annual Review of Psychology*, 48, 139-162.

Francis, L.D. (2003). Organizational justice, sensitivity to injustice and the experience of stress. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64.*

Francis, L J. (1992). Religion, neuroticism, and psychoticism. In J. F. Schumaker (ed.), *Religion and Mental Health*. New York: Oxford University Press.

Freud, S. (1963). *Character and culture*. New York : Collier.

Friedman, W. J., Robinson, A. B., & Friedman, B. L. (1987). Sex differences in moral judgments? *Psychology of Women Quarterly*, 11, 37-46.

Frolich, N., Oppenheimer, J. A. & Eavey, C.L., (1987) Laboratory results on Rawls's Distributive Justice. *British Journal of Political Science*,17, 1-21.

Furby, L. (1986). Psychology and justice. In R. L. Cohen (Ed.), *Justice: Views from the social sciences*. New York: Plenum.

Furnham, A. (1991). Just world beliefs in twelve societies. *The Journal of Social Psychology,* 133, 3, 317-329.

Furnham, A. (1988) Adjustment of sojourners. In Y. Y. Kim & W. B. Gudykunst (Eds.) C*ross-Cultural Adaptation*. Newbury, CA: Sage.

Furnham, A., & Procter, E. (1992). Sphere-specific just world beliefs and attitudes to AIDS. *Human Relations,* 45, 265-280.

Galea, G. and Wright, B., (1999).Sex, Roles and Justice: A Study of Gender as a Predictor of Fairness in Decision Making. *Women in Management Review*, 14, 3, 89-98.

Gilligan, C. (1977). *In a different voice: Women's conception of the self and morality*. Harvard University Press: Cambridge.

Gilligan, C. (1982). *In a different voice: Psychological theory and woman's development*. Massachusetts: Harvard University Press.

Gilligan, C., & Attanucci, J. (1988). Two moral orientations: Gender differences and similarities. *Merrill-Palmer Quarterly*, 34, 223-237.

Graham, S. (1989). Motivations in Afro-Americans. In Berry, G.L. & Asamen, J.K. (Eds.), *Black Students*. Calafornia: Sage.

Greenberg, J. (1982). Approaching equity and avoiding inequality in groups and organisations. In Greenberg, J. and Cohen, R. L. (Eds.), *Equity and justice in social behaviour*. New York: Academic Press.

Greenberg, J. (1986). Differential intolerance for inequity from organizational and individual agents. *Journal of Applied Social Psychology*, *16*, 191-196.

Greenberg, J. (1987). Reactions to procedural injustice in payment distributions: Do the means justify the ends? *Journal of Applied Psychology*, 72, 1, 55-61.

Greenberg, J. (1990). Looking fair vs. being fair: Managing impressions of organisational justice. *U. S Research in Organisational Behaviour*, 12, 111-157.

Greenberg, J. (1994). Using socially fair treatment to promote acceptance of work site smoking ban. *Journal of Applied Psychology*, 79, 288-297.

Greenberg, J. (2001). Setting the justice agenda: seven unanswered questions about "what, why, and how". *Journal of Vocational Behavior*, 58, 210-219.

Heaven, P.C., Stones, C., Simbayi, L., & Le Roux, A. (2000). Human values and social identities among samples of white and black South Africans. *International journal of Psychology*, 35, 1, 67-72.

Hofstede, G. (1993). Cultural constraints in management theories. *The Executive, 7, 1*, 81-94.

Hofstede, G. (1980). Culture's consequences: International differences in work related values. Beverly Hills, CA: Sage

Hogg, M.A. & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London: Routledge.

Holmes, R.L. (1993). *Basic Moral Philosophy*. Wadsworth Publishing Company: California.

Homans, G. S. (1961). *Social behaviour: Its elementary forms*. New York: Harcourt, Brace and World.

Houlden, P., LaTour, S., Walker, L., & Thibaut, J. (1978). Preference for modes of dispute resolution as a function of process and decision control. *Journal of Experimental Social Psychology*, 14, 13-30.

Howell, D. C. (1992). *Statistical methods for psychologists*. California: Duxberry Press.

Http: //demography.anu.edu.au

Hume, D. (1951). *A treatise of human nature*. Oxford: Claredon Press. (Original work published in 1739).

Hunt, M.O. (2000). Status, Religion, and the 'Belief in a Just World': Comparisons of African-Americans, Latinos, and Whites. *Social Science Quarterly*, 81, 325-343.

Huo, Y. J., Smith, H. J., Tyler, T. R., & Lind, E. A. (1996). Superordinate identification, subgroup identification, and justice concerns: Is separatism the problem, is assimilation the answer? *Psychological Science*, 7, 40-45.

Hyland, M.E., & Dann, P.L. (1987). Exploratory factor analysis of the Just World Scale using British undergraduates. *British Journal of Social Psychology, 26,* 73-77.

Jaffee, S., & Hyde, J. S. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin*, 126, 703-726.

James, W. (1890). *Principles of Psychology*. New York: Holt.

Jaret, C. and Reitzes, D.C. (1999). The importance of racial-ethnic identity and social settings for blacks, whites, and multiracials. *Sociological Perspectives,* 42, 4, 711-737.

Jasso, G. (1978). On the justice of earnings: A new specification of the justice function evaluation. *American Journal of Sociology*, 83, 1398-1419.

Jasso, G. (1980). A new theory of distributive justice. *American Sociological Review*, 45, 3-22.

Jasso, G and Rossi, P.H. (1977). Distributive justice and earned income. *American Sociological Review, 42, 639-651*

Jasso, G. and Webster, M. (1999). Assessing the Gender Gap in Just Earnings and Its Underlying Mechanisms. *Social Psychology Quarterly*, 62, 367-380.

Johnson, M. L. (1996). How moral psychology changes moral theory. May, L, Friedman, M. & Clark, A. (Eds.). *Mind and Morals*. MIT Press: Cambridge

Johnson, R. A. & Wichern, D. W. (1998*). Applied multivariate statistical analysis (4th ed.).* New Jersey: Prentice Hall.

Johnston, M. (1988). Self-Deception and the Nature of Mind. McLaughlin B.P. and Rorty, A.O. (Eds.) In *Perspectives on Self-Deception*. University of California Press: California.

Kass, G. V. (1980). An exploratory technique for investigating large quantities of categorical data. *Applied Statistics* 29, 2, 119-127.

Katz, L. A. & Miller, K. (1999). Organisational justice perceptions and their impact on employee attitudes. *South African Journal of labour Relations*, 23, 2, 70-81.

Kerlinger, F. N. (1986). *Foundations of behavioural research (3rd ed.).* Fort Worth: Harcourt Brace Jovanovich College Publishers.

Khoza, R. (1994). The need for an Afrocentric management approach. In Christie, P.,Lessem, R. & Mbigi, L. (Eds.). *African Management: Philosophies, concepts, and applications*. Johannesburg: Knowledge Resources.

Kline, P. (1994). An easy guide to factor analysis. London: Routledege.

Kohlberg, L. (1963). The development of children's orientation towards a moral order: I Sequence in the development of moral thought. *Vita Humana*, 6, 11-33.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialisation. In Goslin, D.A. (Ed.). *Handbook of socialisation theory and research*. Rand McNally: Chicago.

Kohlberg, L. (1976). Moral Stages and moralisation: The cognitive-developmental approach. In Lickona, T. (Ed), *Moral development and behaviour: Theory, research, and social issues*. Holt, Rinehart, and Winston: New York.

Kohlberg, L. (1984). Moral Stages and moralisation: The cognitive-developmental approach. In *Essays on moral development: Vol.2. The psychology of moral development: The nature and validity of moral stages.* Harper & Row: San Francisco.

Korsgaard, M., Schweiger, D., & Sapienza, H. (1995). Building Commitment, Attachment, and Trust in Strategic Decision-Making Teams: The Role of Procedural Justice. *Academy of Management Journal*, 38,1, 60-84.

Kottraba, C. (2003). The relationship between organisational justice, employee absenteeism, and role stress**.** *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64.*

Kravitz, D. A. (1995). Attitudes toward affirmative action plans directed at blacks: effects of plan and individual differences. *Journal of Applied Psychology*, 25, 2192-2220.

Kravitz, D. A., Harrison, D. A., Turner, M. A., Levine, E. L., Chaves, W., Brannick, M. T., Denning, D. L., Russel, C. J., & Conrad, M. A. (1997). *Affirmative action: a review of psychological and behavioural research*. Ohio: Society for Industrial and Organisational Psychology.

Krznaric, S. J. (1999). A cluster analysis of the MMPI-2 profiles of multiple DUI offenders. *Dissertations International, 60(6-A)*, US: Univ Microfilms International.

Lam, S.S.K., Schaubroeck, J., and Aryee. S. (2002). Relationship Between Organizational Justice and Employee Work Outcomes: A Cross-National Study. *Journal of Organizational Behavior*, 23, 1, 1-18.

Langdale, C.J. (1986).A Re-Vision of Structural-Developmental Theory. In Sapp, G. (Ed.), *Handbook of Moral Development*. Birmingham, AL: Religious Education Press.

Lee, C. & Fahr, L (1999). The Effects of Gender in Organizational Justice Perceptions. *Journal of Organizational Behavior*, 20, 1, 133–143.

Lee, C., Pillutla, M., & Law, K.S. (2000). Power Distance, gender and organizational justice: A Hong Kong study. *Journal of Management*. 26, 4, 685-704.

Leedy, P. D. (1993). *Practical research: planning and design*. New York: MacMillan.

Lerner, M.J. (1974). The Justice Motive: Equity and Fairness Among Children. *Journal of Personality and Social Psychology* , 29, 539-550.

Lerner, M. J. (1975). The Justice Motive in Social Behavior: Introduction. *Journal of Social Issues*, 31, 1-19.

Lerner, M. J. (1977). The justice motive: Some hypotheses as to its origins and its forms. *Journal of Personality,* 45, 1-51.

Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion.* New York: Plenum Press.

Leung, K., Chiu, W.H., & Au, Y. F. (1993). Sympathy and support for industrial actions: a justice analysis. *Journal of Applied Psychology*, 78, 781-787.

Leventhal, G.S. (1976). The distribution of reward and resources in groups and organisations. *Advanced Experimental Social Psychology*, 9, 91-131.

Leventhal, G. S. (1980). What should be done with equity theory? In Gergen, K. J., Greenberg, M. S. & Willis, R. H. (Eds.), *Social exchange: Advances in theory and research*. New York: Plenum Press.

Lind, E.A. (2001). Thinking critically about justice judgements. *Journal of Vocational Behavior*, 58, 220-226.

Lind, E. A. & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.

Lind, E. A., Tyler, T. R., & Huo, Y. J. (1997). Procedural context and culture: Variation in the antecedents of procedural justice judgements. *Journal of Personality and Social Psychology*, 73, 4, 767-780.

Lissowski, G., Tyszka, T., and Okrasa, W. (1991). Principles of distributive justice, *Journal of Conflict Resolution* , 35, 98-119.

Ma, L. and Smith, K.B., (1985). Individual and Social Correlates of The Just World Belief: A Study of Taiwanese College Students. *Psychological Reports, 57,* 35-38

Mann, L., Radford, M., & Kanagawa, C. (1985). Cross-cultural differences in children's use of decision rules: A comparison between Japan and Australia. *Journal of Personality and Social Psychology*, 49, 1557-1564.

May, L, Friedman, M. & Clark, A. (1996).*Mind and Morals*. MIT Press: Cambridge

McCall, R. B. (1990). *Fundamental statistics for the behavioural sciences* (5th ed.). Philadelphia: Harcourt Brace Jovanovich publishers.

McFarlin D. B. & Sweeney P. D. (2001). Cross-cultural applications of organisational justice in Cropanzano, R. (Ed). *Justice in the workplace (Volume 2): From theory to practice*. Lawrence Erlbaum and Associates: New Jersey.

McKennel, R. (1970). Attitudinal measurement: use of a coefficient alpha with a cluster or factor analysis. *Sociology*, 4, 227-247.

Messick, D. M., Bloom, S., Boldizar, J. P. & Samuelson, C. D. (1985). Why we are fairer than others. *Journal of Experimental Social Psychology, 21,* 480-500.

Mikula, G., Petri, B. & Tanzer, N. (1990). What People Regard as Unjust: Types and Structures of Everyday Experiences of Injustice. *European Journal of Social Psychology*, 20, 133-149.

Moore, G.E. (1903). *Principia Ethica*. Cambridge Press: United Kingdom

Moorman, R.H. (1991). The relationship between organisational justice and organisational citizenship behaviours: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76, 6, 845-855.

Moran. G. & Comfort, J.C. (1982). Scientific juror selection: Sex as a moderator of demographic and personality predictors of impaneled felony juror behavior. *Journal of Personality and Social Psychology, 43*, 1052-1063.

Morris, M. W., & Leung, K. 2000. Justice for all? Progress in research on cultural variation in the psychology of distributive and procedural justice. *Applied Psychology: An International Review*, 49, 100-132.

Musante, L., Gilbert, M. A., & Thibaut, J. (1983). The effects of control on perceived fairness of procedures and outcomes. *Journal of Experimental Social Psychology*, 19, 223-238.

Niehoff, B.P. & Moorman, R.H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*, 36, 527-556.

Notz, W., & F. Starke, (1978). Final offer versus conventional arbitration as means of conflict management. *Administrative Science Quarterly*, 23, 189-203.

Nozick, R. (1974) *Anarchy, State and Utopia*. New York: Basic Books.

Nussbaum, M.C. (2000). *Women and human development: The capabilities approach*. Cambridge University Press: United Kingdom.

O'Connor, W.E., Morrison, T.G., McLeod, L.D., & Anderson, D. (1996). A meta- analytic review of the relationship between gender and belief in a just world. *Journal of Social Behaviour and Personality, 11,* 141-148.

Parker, C. P., Baltes, B. B., & Christiansen, N. (1997). Support for affirmative action, justice perceptions, and work attitudes: An analysis of gender and racial/ethnic group differences. *Journal of Applied Psychology*, 82, 376-389

Pedersen, D.M. (1994). Identification of levels of self-identity. *Perceptual and Motor Skills*, 78, 1155-1167.

Pedersen, D.M. (1999). Validating a centrality Model of Self-identity. *Social Behavior and Personality*, 27, 1, 73-86.

Pfeffer, J., & Langton, N. (1993). The effect of wage dispersion on satisfaction, productivity, and working collaboratively: evidence from college and university faculty. *Administrative Science Quarterly*, 38, 382-407.

Piaget, J. (1932). *The moral judgement of the child* (M. Gabain, Trans.) Free Press: New York.

Piaget, J. (1965). *The Moral Judgment of the Child*. Free Press: New York

Pillai, R., Williams, E.S., and Tan J., (2001). Are the Scales Tipped in Favor of Procedural or Distributive Justice? An Investigation of the U.S., India, Germany, and China. *International Journal of Conflict Management*, 12, 3, 310-333.

Pol, L.G. and Thomas, R.K. (2000). *The Demography of Health and Health Care*, 2nd Edition, Kluwer Academic/Plenum Publishers: New York.

Pratto, F, Tatar, D, & Conway-Lanz, S. (1999). Who gets what and why? Determinants of social allocations. *Political Psychology*, 20, 127-150.

Rahim, M.A., Magner, N., Antonioni, D., & Rahman, S. (2001). Do justice relationships with organization-directed reactions differ across U.S. and Bangladesh employees? *International Journal of Conflict Management, 12,* 334-350.

Randall, C. S. & Mueller, C. W. (1995). Extensions of justice theory: Justice evaluations and employees' reactions in a natural setting. *Social Psychology Quarterly*, 58, 3, 178-194.

Rawls, J. (1958). *Justice as fairness.* John Rawls: Collected Papers

Rawls, J. A. (1971). *A theory of justice*. Massachusetts: Harvard University Press.

Rawls, J (2000). *A theory of justice*. Oxford University Press: United Kingdom

Rest, J.R. (1979). *Development in judging moral issues*. Minneapolis: University of Minnesota Press.

Riordan, C. M., & Shore, L. M. (1997). Demographic diversity and employee attitudes: An empirical examination of relational demographics within work units. *Journal of Applied Psychology*, 82, 342-358.

Rogers, C.R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In S. Koch (ed.). *Psychology: A study of science*.N.Y.: McGraw Hill.

Rosenthal, R. & Rosnow, R. (1991). *Essentials of behavioural research: Methods and data analysis*. New York: McGraw Hill.

Ross, M., Thibaut, J., & Evenbeck, S. (1971). Some determinants of social protest. *Journal of Experimental Social Psychology, 1*, 401-418.

Roucek, J.S. & Warren, R.L (1968) Sociology. An Introduction**.** Littlefield:Adams.

Royce, J.R. (1963). Factors as theoretical constructs. In Jackson, D.N. and Messick, S. (Eds.), *Problems in human assessment*. McGraw Hill: New-York.

Rubin, Z., & Peplau, L.A. (1975). Who believes in a just world? *Journal of Social Issues,* 31, 3, 65-90.

Runyon, R. P. & Haber, A. (1976). *Fundamentals of behavioural statistics (3rd ed.).* Massachusetts: Addison-Wesley Publishing Company.

Sampson, E. E. (1969). Studies in status congruence. In Berkowitz, L. (Ed.) *Advances in experimental social psychology.* New York: Academic Press.

Sampson, E. E. (1983) *Justice and the Critique of Pure Psychology,* New York: Plenum.

Savery, B. (1948). Ethics as psychology rather than philosophy. *Canadian Journal of Psychology*, 2, 3, 140-144.

Schwarzwald, J., Koslowsky, M. & Shalit, B. (1992). A field study of employees' attitudes and behaviors after promotion decisions. *Journal of Applied Psychology, 77*, 511-514.

Scheffler, S. (1992). *Human Morality*. Oxford University Press: Oxford.

Schneider, S.K. & Northcraft, G.B. (1999). Three social dilemmas of workforce diversity in organisations: A social identity perspective. *Human Relations*, 52, 11, 1445-1463.

Sen, A.S. (1999). *Development as freedom*. Anchor Books: New York.

Shapiro, D.L. (2001). The death of justice theory is likely if theorists neglect the wheels already invented and the voices of the injustice victims. *Journal of Vocational Behavior,* 58, 235-242.

Shapiro, D.L., Buttner, E.H. and Barry, B. (1994). Explanations: What factors enhance their perceived adequacy? *Organizational Behavior and Human Decision Processes*, *58*, 346-368.

Sidgwick, H. (1907). *The methods of ethics (7th Edition)*. Macmillan: London.

Simmonds, N.E. (2002). *Central issues in jurisprudence: Justice, law and rights.* London: Sweet & Maxwell.

Singer, P. (Ed.). (1994). *Ethics.* Oxford: Oxford University Press.

Skarlicki, D. P. & Folger, R. (1997). Retaliation in the workplace: The role of distributive, procedural and interactional justice. *Journal of Applied Psychology*, 82, 3, 434-443.

Skitka, L.J. & Tetlock, P.E.(1992) Allocating aid: The roles of scarcity, ideology, causal attributions, and distributive norms. Journal of Experimental Social Psychology, 29, 397-409.

South, Scott J. and Steven F. Messner. (2000). Crime and Demography: Multiple Linkages, Reciprocal Relations. *Annual Review of Sociology*, 26, 83-106.

Smith K.B., Green D.N. (1984). Individual correlates of the belief in a just world. *Psychological Reports*, 54, 435-438.

Stryker, S. (1980). *Symbolic interactionism: A social structural version*. California: Benjamin Cummings.

Tajfel, H. (1981). *Human groups and social categories*. Cambridge, England: Cambridge University Press

Tajfel, H. & Turner, J. C. (1979). An integrative theory of inter-group conflict. In Austin,W.G. and Worchel, S. (Eds.), *The social psychology of inter-group relations.* California: Brooks/Cole.

Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In Worchel, S. and Austin, W. G. (Eds.), *Psychology of intergroup relations*. Chicago: Nelson-Hall.

Tata, J. (2000). She said, He said. The influence of remedial accounts on third party judgements of co-worker sexual harassment. *Journal of Management*, 26, 6, 1133-1156.

Thibaut, J., Friedland, N., and Walker, L. (1974). Compliance with Rules: Some Social Determinants. *Journal of Personality and Social Psychology*, 30, 792-801.

Thibaut, J. W., & Walker, L. (1975). *Procedural justice: a psychological analysis*. Hillsdale: Lawrence Erlbaum

Tong, Y.Y., Hong, Y.Y., Lee, S.L., & Chiu, C.Y. (1999). Language use as a carrier of social identity. *International Journal of Intercultural Relations*, 23(2), 281-296.

Tjafel, H. (1981). *Human groups and social categories: studies in social psychology*. Cambridge: Cambridge University press.

Turner, J. H. (1991). *The structure of sociological theory (5th ed.).* California: Wadsworth.

Tustin, C. (1994). *Industrial Relations: A Psychological Approach*. Johannesburg: Southern Book Publishers.

Tyler, T. R. (1984). The role of perceived injustice in defendants' evaluations of their courtroom experience. *Law and Society Review*, 18, 51–74

Tyler, T. R. (1989). The psychology of procedural justice: a testy of the group value model. *Journal of Personality and Social Psychology*, 57, 830-838.

Tyler, T.R. & Bies, R.J. (1990). Beyond formal procedures: The interpersonal context of procedural justice. In Carrol, J.; (Ed.), *Applied social psychology and organizational settings*. Hillsdale, NJ: Erlbaum.

Tyler, T. R., & Blader, S, (2000). *Cooperation in groups: Procedural justice, social identity and engagement*. Philadelphia: Psychology Press.

Tyler, T. R., & Caine, A. (1981). The influence of outcomes and procedures on satisfaction with formal leaders. Journal of Personality and Social Psychology, 41, 642- 655.

Tyler, T. R., Degoey, P., & Smith, H. J. (1996). Understanding why the justice of group procedures matters. *Journal of Personality and Social Psychology*, 70, 913-930.

Tyler, T.R., and Degoey, P. (1995). Collective restraint in a social dilemma situation: The influence of procedural justice and community identification on the empowerment and legitimacy of authority. *Journal of Personality and Social Psychology*, 69, 482-497

Tyler, T. R., and Lind, E. A. (1991). Procedural processes and legal institutions. In Steensma, H. and Vermunt, R. (Eds.), *Social justice in human relations (Vol.2): Societal and psychological consequences of justice and injustice.* New York: Plenum.

Tyler, T.R., and Lind, E.A. (1992). A relational model of authority in groups. In Zanna, M. (Ed.), *Advances in experimental social psychology* (Vol. 25).New York, NY: Academic Press.

Umberson, D. (1993). Sociodemographic position, worldviews, and psychological distress. *Social Sciences Quarterly*, 74, 575-589.

Vermunt, R. & Steensma, H. (1991). Social justice in human relations: Societal and psychological origins of justice (Vol. 1). New York: Plenum.

Wagstaff, G. F., & Quirk, M. A. (1983). Attitudes to sex roles, political conservatism and belief in the just world. *Psychological Reports*, 2, 151–176.

Walker, L.J. (1984). Sex differences in the development of moral reasoning: A critical review. *Child Development*, 55, 677-691.

Walster, E., Berscheid, E., & Walster, G. W. (1973). New directions in equity research. *Journal of Personality and Social Psychology*, 25, 151-176.

Walzer, M. (1993). *Spheres of justice: a defence of pluralism and inequality*. Oxford: Robertson.

Wenzel, M. (2000). Justice and identity: The significance of inclusion for perceptions of entitlement and the justice motive. *Personality and Social Psychology Bulletin*, 26, 2 , 157-176.

Whatley, M. A. (1993). Belief in a just world scale: Unidimensional or multidimensional? *Journal of Social Psychology*, 133, 547-551.

White, M.M., Tansky, J.A., & Baik, K. 1995. Linking culture and perceptions of justice: A comparison of students in Virginia and South Korea. P*sychological Reports*, 77, 1103-1112.

Witt, L.A. (1989). Urban-nonurban differences in social cognition: Locus of control and perceptions of a just world. *Journal of Social Psychology*, 129, 715-717.

Wolff, J (1996). *An introduction to political philosophy*. Oxford University Press: Oxford.

Yacker, N., & Weinberg, S. (1990). Care and justice moral orientation: A scale for its assessment. *Journal of Personality Assessment, 55*, 18-27.

Young, I.M. (1990). *Justice and the politics of difference*. Princeton University Press: New Jersey.