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Perceptions of Interracial Contact in a South African Sample:
A Q-Methodological Approach

A research report submitted in partial fulfilment of the degree of
Master of Research by Coursework and Research Report

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17th of March 2014

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I declare that this research project is my own work. It has not been previously submitted for any other degree or examination at this or any other university

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Acknowledgements

Before acknowledging or thanking anyone else, I would like to extend my heartfelt gratitude to my supervisor, Prof. Gillian Finchilescu. I am well aware that I can often be a tortuous student and I am extremely grateful for her calm yet firm approach to supervision. Her experience seems insuperable and I feel that I have grown tremendously with her guidance.

Another very important influence on this project has been that of the programme's Course Coordinator, Dr. Kevin Whitehead. His open door policy and genuine desire to support and aid students is commendable. From being the Ethics Reader for this project to assisting with the Q-set to general help and advice throughout the project, Kevin has been an inspiration to me.

At this point I would also like to thank my Methods Reader, Ian Siemers, for being so thorough and helpful; and Prof. Garth Stevens, who gave the initial contributions towards the Q-set. I am especially grateful to Garth, who was on sabbatical at the time I approached him for advice and, despite his time constraints, still managed to give excellent feedback.

A huge thanks goes out to my participants for helping me with this study. I appreciate their time and willingness to participate.

My colleagues, friends, and family have been very understanding of my needs while I have been working on this research and have suffered through my grief and anxiety without a single complaint. My best friends, Robyn and Chantal, as well as my "digsmate," Avril, have heard the worst of it and been so stoic and kind even when times were good. I appreciate everyone's encouragement more than what I show and hope that when this is all over we will be able to enjoy a calm period in which my social life can be salvaged...until I do my PhD. Thank you to Kyle as well, who stepped in at the last minute to help me do the final editing and formatting.

Others who assisted with the project include some of my students at International Pre-University College, who willingly contributed to the concourse. I would especially like to thank a former student, Tariq, for diligently recording race-related comments and observations surrounding contact at the University of Cape Town. All of my students, both past and present, have been invaluable supporters of the project and without their encouragement and belief in me I would have struggled much more than I did. This year's group of students is particularly exceptional and I feel privileged to be part of their education. Working part-time at the College has been incredible, and having a full-time job there to walk into at the conclusion of this research makes me happier than words could ever express.

My final thanks is reserved for my parents, who have funded my studies and been there for me whenever I needed them. Not everyone is blessed enough to have two parents, let alone two very supportive parents, and I cannot thank them enough for all that they have done. My mother has been especially wonderful by helping me with a lot of the admin for this project.

Dedication

This project is dedicated to the father of our nation, Mr Nelson Mandela, whose heroic struggles ultimately led to the conception of my research.

May we one day reject the facade of harmony and replace it with harmony itself. May we always treat each other with compassion, respect, and integrity. May we teach our nation's children not to tolerate, but to accept and embrace. May our Tata's legacy continue through us in this way, and through us may the king of kings live on.

"No one is born hating another person because of the colour of his skin, or his background, or his religion. People must learn to hate, and if they can learn to hate, they can be taught to love, for love comes more naturally to the human heart than its opposite." ~ Nelson Mandela

Table of Contents

Chapter 1: Introduction 9
1.1. Overview 9
1.2. Statement of the Problem 9
1.3. Aim and Purpose 10
1.4. Significance 10
1.5. Conceptual Framework 11
1.6. Definition of Terms 11
Chapter 2: Literature Review 13
2.1. Race and Segregation in Contemporary South Africa 13
2.2. A Slow Walk to Freedom 15
2.3. Intergroup Contact Literature 17
2.4. Interracial Contact Literature in South Africa 21
2.5. Complexity of interracial contact research in South Africa 23
2.6. Society, the Individual, and Race 24
2.7. The problem with contact theory in South Africa 25
2.8. Conclusion 27
Chapter 3: Q-Methodology 28
3.1. Q-methodology as a way forward 28
3.2. Overview of Q 28
3.3. Data collection in Q-studies 29
3.4. Analysis and Interpretation in Q-studies 31
3.5. Reliability and validity 33
3.6. Summary 33
Chapter 4: Methods 35
4.1. Summary of Methodology 35
4.2. Concourse 35
4.3. Q-set 36
4.4. Sample 37
4.5. Measures 37
4.6. Procedure 38
4.7. Analysis 40
Chapter 5: Results 42

5.1. Summary of factors 42
5.2. Correlations between factors 43
5.3. Factor interpretation 46
5.4. Summary 57
Chapter 6: Discussion 58
6.1. Summary of aims and results 58
6.2. Summary of factors 58
6.3. Discussion of findings in relation to the literature 59
6.4. New insights 62
6.5. The value of Q-methodology 64
6.6. Reflexivity 65
6.7. Limitations 66
6.8. Conclusions 68
6.9. Recommendations 68
References 70
Appendices 76
Appendix A: Ethical Clearance 76
Appendix B: Participant Information Sheet 77
Appendix C: Focus group consent 78
Appendix D: Concourse 79
Appendix E: Final Q-set 87
Appendix F: Demographics Questionnaire 89
Appendix G: Factor arrays with Q-sort values only 90
Appendix H: Characterising and Distinguishing Items for all Factors 92

List of Figures

Figure 1. “Have race relations improved in the last year?” 17
Figure 2. An example of a Q-sort distribution 31
Figure 3. Q-sort distribution.....38

List of Tables

Table 1. *2011 SASAS data indicating beliefs and percentage of the population in agreement* ..16
Table 2. *Composite reliability scores for each factor* 42
Table 3. *Correlations between factors and their effect sizes according to Cohen’s criteria* 43
Table 4. *Consensus items across factors with corresponding Q-sort values* 45
Table 5. *Items qualifying for analysis in Factor 1* 48
Table 6. *Items qualifying for analysis in Factor 2* 50
Table 7. *Items qualifying for analysis in Factor 3* 53
Table 8. *Items qualifying for analysis in Factor 4* 55
Table 9. *Factor array Q-sort values by item* 90
Table 10. *Characterising items for Factor 1* 92
Table 11. *Characterising items for Factor 2* 93
Table 12. *Characterising items for Factor 3* 94
Table 13. *Characterising items for Factor 4* 95
Table 14. *Distinguishing statements for Factor 1* 96
Table 15. *Distinguishing statements for Factor 2* 97
Table 16. *Distinguishing statements for Factor 3* 98
Table 17. *Distinguishing statements for Factor 4* 99

Chapter 1: Introduction

1.1. Overview

This research seeks to investigate interracial contact perceptions in South Africa and to add to the current body of knowledge on the topic, specifically in the domain of perceptions of interracial contact. The method used is Q-methodology, a lesser known research technique which uses people's subjectivities on a given topic to develop clusters of people who think, feel, or have similar beliefs about the topic. The relevance of this technique is its ability to classify people in a quantitative way based on their qualitative expression of views. In South Africa specifically, the technique could allow for a greater level of awareness regarding the way people perceive practices and conceptions of interracial contact to aid understanding of persistent segregation.

1.2. Statement of the Problem

It has been noted that "[i]ntergroup friction and prejudice remain key social issues worldwide despite increased contact between social groups" (Paolini, Harwood & Rubin, 2010, p. 1733). In a massive meta-analysis of over 500 studies on contact, it was observed that approximately half of the studies revolved around contact between racial groups (Pettigrew & Tropp, 2006), indicating that interracial contact is an important concern in global contact literature. In South Africa especially, race is a pivotal issue:

> People feel troubled by race. They feel attacked, undermined, threatened, and they respond with irritation, anger and hostility. Sometimes they withdraw or ignore the trouble, sometimes they harbour private resentment. But race trouble reaches beyond experience. It can determine our opportunities, prospects and interactions. Race intrudes into and disrupts our lives. It contours our practices, the things we say and do, how we interact with others, the choices we make, and how we feel about ourselves and others. In short, race troubles us by structuring how we live and but thus shaping our experiences (Durrheim, Mtose, & Brown, 2011, p. 27).

Despite the passing of two decades since apartheid formally ended and segregation laws being eradicated, South Africans still show a marked tendency to cluster around people of the same race (Durrheim, Mtose, & Brown, 2011). This is problematic as it "suggests a lack of

reconciliation, and a slow rate of racial transformation, and may well hinder movement towards more positive interracial relations" (Finchilescu, Tredoux, Mynhardt, Pillay, & Muianga, 2007, p. 721). With so little interracial contact happening, Finchilescu *et al.* (2007) proposed the question of *why* people are hesitant to mix with other race groups. It is this which the projected research seeks to explore further. Exploring barriers to contact in the current racial climate in South Africa is an important step towards establishing ways in which more peaceful interactions can exist.

The work that has been done in the area of intergroup contact with specific relation to race in South Africa has been both quantitative and qualitative. One of the reasons quantitative studies are useful is that information can be compiled systematically to create composite sets of data from which generalisations can be made. It follows that a problem with quantitative studies is that they leave little room to allow for the expression of individual differences and subjectivities. Qualitative studies are helpful for understanding subjective experiences of study participants. Combining aspects of the quantitative and qualitative paradigms through the application of Q-methodology is a useful approach to understanding how people account for the lack of interaction amongst race groups in South Africa.

1.3. Aim and Purpose

The aim of the research is to explore perceptions of interracial contact in South Africa in a sample of students at the University of the Witwatersrand. This is achieved with a Q-methodological design which can uncover groups of people who think similarly about interracial contact. Q-methodology is exploratory by nature and this study will examine subjectivities of people regarding interracial contact in South Africa. The research is intended to make a valid and useful contribution to what is currently known about interracial contact issues and segregation persistence in this country.

1.4. Significance

Q-methodology was designed to examine a person's beliefs, attitudes and opinions on a topic, thus it allows for people to express themselves in a qualitative way that is specific to their own subjectivity (Brown, 1980). While this expression of subjectivity is largely in the qualitative domain, through the factor analysis used in a Q-methodological design, a "mathematical

substructure" (Cross, 2005, p. 210) is achieved and the results also take on a quantitative dimension, making it possible to empirically compare sets of perceptions which emerge. This "qualiquantological" nature of Q-methodology (Stenner & Stainton Rogers, 2004) yields a set of data which is fascinating in its own right and might be particularly useful in the context of race given its ongoing pertinence in the lives of South Africans. A study on attitudes surrounding perceptions of interracial contact using Q-methodology has not been found in the extant literature and this study may be helpful in explicating aggregate accounts of why people are hesitant about making contact with other race groups in South Africa.

1.5. Conceptual Framework

The general point of departure for the literature in this study is race relations in contemporary South Africa. This is succeeded by the literature on intergroup contact, starting with Allport's (1954) contact hypothesis. Concepts related to intergroup contact as well as some mediating and moderating influences are discussed, both generally and in the South African context. The literature then focuses on the complexities and limitations of interracial contact research in South Africa, which includes the interplay amongst society, the individual, and interracial contact.

1.6. Definition of Terms

"*Perceptions*" is a conceptual summary word referring to the views, beliefs, attitudes, opinions held by people on the topic of interracial contact. "*Perceptions*" is used operationally to refer to what is being measured in this study through Q-methodology. "*Subjectivity*" refers to the way people rank their perceptions according to personal psychological significance. Other terms which may require some understanding are "*contact*" and "*race*" (the term "*interracial*" very simply refers to contact amongst races), and the word "*mixing*" sometimes used in the literature review and the final set of items to be ranked by participants. Conceptually speaking, the terms "*contact*" and "*mixing*" are used broadly in this study to refer to any kind of relations ranging from speaking to someone to having close interpersonal interactions with them, and the term "*race*" is used to refer to the way in which people are classified according to the historic positioning of groups in South Africa based on skin colour. Operationally speaking, it is difficult to say how the terms, "race", "contact", and "mixing" are used by participants since these terms were not defined for them and could have a range of meanings for different participants –

something which is embraced by Q-methodologists rather than seen as a complication or limitation (Watts & Stenner, 2012).

Chapter 2: Literature Review

2.1. Race and Segregation in Contemporary South Africa

The early 1990s was an intense era in South African political history. Apartheid was abolished, segregation outlawed, and the country's first Black president came into power. Durrheim and Dixon (2005, p. 209) provide asynopsis of these changes:

> When it finally occurred, desegregation in South Africa took the form of a quick about turn. Within a relatively short period of time, the vast tapestry of apartheid legislation was scrapped and practices of segregation that had been normative for hundreds of years were outlawed. The new government adopted wide-ranging policies to redress the injustices of the past, many of which were aimed at fast-tracking desegregation (e.g. land distribution and affirmative action in education, employment and sport).

In the face of all of these changes following apartheid's demise, the greatest change relevant to intergroup contact was an increase in the possibility for interracial mixing to occur (Finchilescu & Tredoux, 2010, p. 230). Suddenly, contact situations with people of other races became everyday phenomena in a world that was previously understood to be divided. People were forced to interact and exchange polite transactions. Formerly segregated spaces were now multiracial. Overt racism was subsumed by newer forms of racism which were much more implicit in the face of possible prosecution for racist utterances and behaviour (Durrheim & Dixon, 2005).

South Africa's political history has ultimately led to strained relationships between race groups. Durrheim *et al*. (2011) use the term "race trouble" to capture the way in which race is navigated by people on a daily basis such that people tend to behave in racially oriented ways. Race is present because it defines much of our interactions, but it is also absent because it is difficult to talk about for fear of causing offense, inciting oversensitivity, or hurting others. Similar to this concept of race trouble is what Beall, Gelb, and Hassim (2005) term, "fragile stability" to characterise the effects of South Africa's transition into democracy. The authors acknowledge that the term cannot capture the full complexity of the reality of racial issues faced in South Africa today; however their conception of the phrase "fragile stability" is highly meritorious in its descriptive ability. They explain that South African society is simultaneously stable and fragile. Stable because "a non-racial democratic political regime has been firmly established and faces

no imminent threat, and the state is accepted as the legitimate authority within the country's territorial boundaries" (p. 682); and fragile because of the seemingly insuperable social problems the country still faces such as poverty, inequality, and unemployment.

A careful examination of the terms "race trouble" and "fragile stability" reveal their capacity to summarise at both an individual and national level a hushed reality about a country so deeply scarred by its past. As individuals, we go about our lives carefully navigating or even avoiding situations which involve members of other race groups as a matter of habit; while as a country we still experience inequality and the effects of oppression as a matter of course. Apartheid continues to oppress the nation with its legacy of race trouble and social, economic, and political inequalities. Not surprisingly, segregation is an ongoing issue in South Africa. In their book, *Race Touble*, Durrheim *et al*. (2011) show time and time again how, as South Africans, "we remain largely segregated and unequal as race continues to define the opportunities of many" (p. 22). They believe that transformation in policy and legislation has done very little to change the racism so prevalent in old South African society, which has been carried forward with more subtlety to allow the maintenance of segregation as well as economic inequality.

Durrheim and Dixon (2005) demonstrated in their research the extreme resilience of segregation and its extraordinary adaption to continuously allow for the systematic structuring of social activity around race. It is segregation which orders and defines social contact in many communities. Beall *et al*.'s (2005) formerly identified notion of 'fragile stability', of "both stabilisation and destabilisation, both regime consolidation and the maintenance and reinforcement of historical social divisions" (p. 697) further highlights the way people are troubled by the past, troubled by race, and compelled towards segregation.

Even where youths have shown positivity about South African affairs, they still point to racial disharmony as a problem (Norris *et al*., 2008). Finchilescu (2005) implicates the history of South Africa as a possible explanation for the difficulty in breaking down race barriers:

> While the generation who grew up in the 1990s have not directly experienced apartheid, their parents and older members of the community would have. Thus, the distorted or lack of knowledge and expectations that developed between the race groups during apartheid is likely to have been perpetuated through the socialisation process. Consequently, stereotypes and negative attributions continue to flourish...Thus, the amount of contact the race groups have is often very small, and limited to superficial and asymmetrical types of

contact (p. 464).

More research needs to be done to understand processes of segregation in a way that is sensitive to people's varied experiences of interracial contact. Research needs to start with an understanding of what ordinary citizens think about interracial contact in order to pave the way towards enlightenment. The South African Social Attitudes Survey is a point in case as it derives from the views of thousands of lay South Africans and highlights areas where redress is most urgently needed.

2.2. A Slow Walk to Freedom

In a paper entitled "Slow walk to freedom: Attitudes towards race relations", authors Gordon, Roberts, and Struwig (2012) reviewed data from the previous five years of research from the South African Social Attitudes Survey (SASAS). For the year of 2011, although there had been some improvements from previous years, the SASAS revealed what the authors call "a disturbing level of distrust" (Gordon *et al*., 2012, p. 5) amongst race groups in South Africa. For pragmatic purposes, the findings which were said to indicate such a level of distrust have been summarised in Table 1 below.

Table 1

2011 SASAS data indicating beliefs and percentage of the population in agreement

Belief	People of other race groups were trying to get ahead economically at the expense of their own group	People of other race groups were excluding members of their own group from positions of power and responsibility	Traditions and values that are important to people of their race group are under threat because of the influence of other races	Other race groups will never understand what members of their group are like	People of different racial groups will never really trust each other
% of population	58	54	49	54	51

The authors appear to be correct in their evaluation of the level of distrust. In all but one marginal case, more than half of the sample was in agreement with the negative beliefs listed in the table. However, the authors concede that at least where trust is concerned, the percentage of people in agreement with the items "People of different racial groups *do not* really trust or like each other" and "People of different racial groups *will never* really trust or like each other" (emphasis added) had steadily declined since 2007, with the percentage of people agreeing with the first of these two items decreasing by 10% since 2007. When asked, "Have race relations improved in the last year?" (see Figure 1), more than half of the population agreed that this was the case every year since 2008, with the greatest level of agreement being in 2010 presumably because of the national pride invoked during the FIFA World Cup. These findings all suggest at the very least that South Africans are becoming incrementally more positive about race relations and more optimistic about progress in this regard.

Figure 1. “Have race relations improved in the last year?”

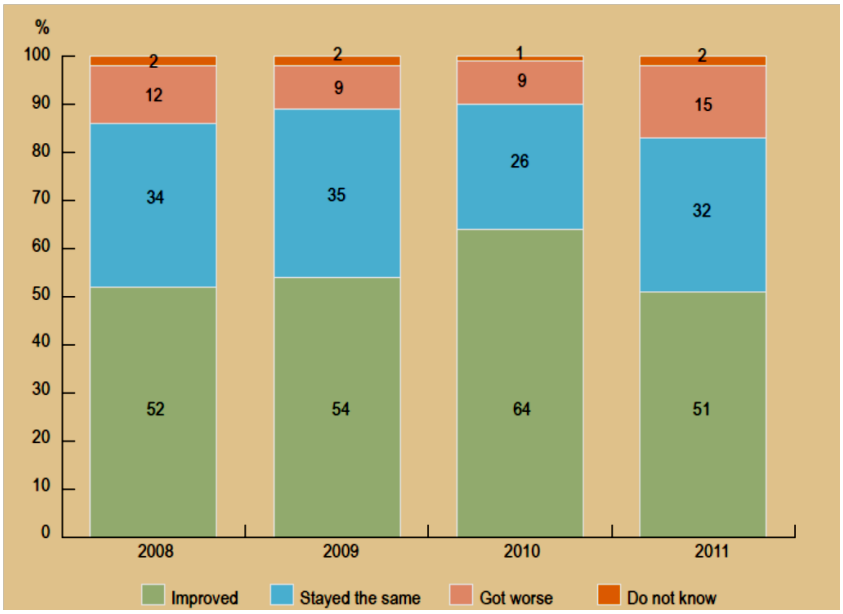


Figure 1. Data from 2008 to 2011 depicts percentages of the population expressing their belief that race relations had either improved, stayed the same, or got worse, or expressing uncertainty about how to answer the question. Taken from “Slow walk to freedom: Attitudes towards race relations” by S. Gordon, B. Roberts, and J. Struwig, 2012, *HSRC Review, 10*, p. 6.

Durrheim, Tredoux, Foster, and Dixon (2011, p. 277) believe that “social psychological research on racial attitudes has provided an occasion to pause and reflect on the state of South African society”. The SASAS research has allowed for such pause and reflection in its provision of simple percentages and discrete data which blatantly highlight changes in the opinions of thousands of South Africans over half a decade. Unfortunately the SASAS review is very limited in its scope and analysis, however more research answering questions similar to those posed in the SASAS could be very illuminating in future contact research. In order for an adequate discussion of interracial contact in South Africa to proceed, it is important to outline what can be understood from general research on intergroup contact.

2.3. Intergroup Contact Literature

The literature on intergroup contact is “rich, varied, and one of the best articulated in social

psychology" (Barlow, Hornsey, Thai, Sengupta, & Sibley, 2013, p. 7). It is thus almost impossible to cover the full range of findings in intergroup contact research; however there is an attempt here to highlight the important ones. What should be particularly noted is that intergroup contact and intergroup contact research are highly complex. There are multiple conditions, considerations, mediators, and moderators which come into play that sometimes lead to contradictory results and indicate that more research is necessary.

The overwhelming majority of the literature on intergroup contact has been centred on prejudice given that prejudice is a major factor explaining avoidance of intergroup contact (Finchilescu, 2010). Within the prejudice literature, Allport's (1954) contact hypothesis has been the main theoretical focus for dispelling prejudice and improving intergroup relations. The contact hypothesis is one of social change which has been guided by the question, "Under what circumstances does interaction between members of different groups increase tolerance?" (Durrheim & Dixon, 2005, p. 37). Four general conditions for this were proposed by Allport (1954). These conditions, when present, are said to facilitate contact between groups such that prejudice is reduced. The conditions are equal status among groups; common goals; intergroup cooperation; and support of authorities, law or custom (Allport, 1954). The greatest support for the contact hypothesis is arguably the meta-analysis by Pettigrew and Tropp (2006), in which contact was found to reduce prejudice in 94% of the 515 studies reviewed (with an average effect size of $r = -.21$). Contact was found to be more effective when the four contact conditions were present, however, as Finchilescu and Tredoux (2010, p. 231) observe from this meta-analysis, "Allport's optimal conditions are facilitatory rather than necessary" since prejudice was reduced even in the absence of the four conditions. This supports Pettigrew's (1998) work on contact theory, in which he claimed that the four conditions are facilitatory but not necessary.

Over the years, there have been a number of adjustments to the contact hypothesis, most notably the addition of facilitatory conditions for optimal contact. Stephan and Stephan (1985) pointed out that the list of proposed conditions necessary for effective intergroup contact had grown to become loosely connected and too diverse even by 1985. This makes it difficult to explain successfully how prerequisite conditions for facilitating intergroup contact would have the desired outcomes. Pettigrew (1998) also protested to this "open-ended laundry list" (p.69), arguing that there should only be one addition to it, namely the potential for friendship. This proposition was not entirely new, as Amir (1976) and Brewer and Miller (1984) (cited in Dovidio, Gaertner, & Kawakami, 2003) highlighted the role of having an opportunity to have personal

acquaintances amongst members across groups. Although Pettigrew's (1998) "friendship potential" condition came after the proposition of the personal acquaintances condition, it is commonly regarded as the fifth and final condition for successful intergroup contact (Rodenborg & Boisen, 2013), possibly because it implicitly assumes the former condition of personal acquaintance potential. Despite these apparently straightforward conditions, it must be noted that prejudice operates in ways that are more complex than the conditions would indicate. A good example of this is the functionality of stereotypes.

Finchilescu *et al*. (2007) implicate stereotypes as one of the major factors in the operation of prejudice, which serve to inhibit intergroup contact. Stereotypes have been defined as "embedded complex mental representations" which "influence the way individuals classify information about others different from themselves" (Combs & Griffith, 2007, p. 226), while racial stereotypes have been described as "the projected thoughts and beliefs that members of one racial group hold about another racial group" (Torres & Charles, 2004, p. 116). This kind of stereotyping can lead to the phenomenon of stereotype *threat*, which is a threat involving the perception of negative stereotypes in a given situation (Steele, 1997). Stereotype threat is thus a metaperception, a perception held about the perceptions the out-group has of one's in-group. Metaperceptions are a second critical issue involved in contact avoidance (Finchilescu, 2010). Frey and Tropp (2006) assert that people will be more inclined to rely on negative stereotypes when attempting to establish how they will be viewed by members of the out-group. This is known as metastereotyping. Metastereotypes are a form of metaperceptions which "refer to the stereotypes that members of a group believe that members of an out-group hold of them and carry a range of emotional and behavioural consequences" (Finchilescu, 2005, p. 465). This series of interconnected issues is centred on concerns about how one will be evaluated by the out-group and reveals the many layers that a single aspect of contact can have.

Related to evaluative concerns are the concepts of out-group trust and intergroup anxiety, which are commonly investigated in the literature. Out-group trust refers to the levels of vulnerability and risk people experience when approaching the out-group, thus making contact less likely when out-group trust is lacking (Tausch, Hewstone, Schmid, Hughes & Cairns, 2011). Frey and Tropp (2006) note that it has been quite well established that intergroup anxiety is a mediator for group contact and intergroup attitudes following Stephan and Stephan's (1985) work on intergroup anxiety. Generally speaking, contact with other groups has the effect of reducing anxiety unless the contact experiences are negative, which can have the opposite effect

(Pettigrew, 1998). In fact, it has been found that it is possible that even one bad encounter involving out-group prejudice can influence the way that individuals feel about interacting with the out-group in the future and may make them less willing to approach these out-group members (Tropp, 2003). These kinds of paradoxical effects of contact are common. For example, when it comes to stereotypes, the "basic premise of the contact hypothesis is that negative stereotypes about other groups arise through lack of personal contact and interaction between groups" (Fischer, 2011, p. 548). However, Rothbart and John (1993) found that negative stereotyping actually increased over the span of four years in which black and Asian individuals had contact across groups.

Group identities and experiences have also been relevant topics in the contact literature. For example, Vorauer (2003) found that people have a greater proclivity toward in-group identification when being judged by members of their own group than by members of other groups during intergroup interaction. Quite paradoxically, it has also been purported that group memberships become more salient through negative intergroup contact and that this has a long-lasting effect (Paolini *et al*., 2010). In-group identification and in-group membership salience are thus influenced by the type of intergroup contact which is taking place and may or may not serve to inhibit future intergroup relations amongst races. Verkuyten, Thijs, and Bekhuis (2010) illustrate that the strength of in-group identity (and therefore the likelihood of being prejudiced against the out-group) can be reduced by multiculturalism. Multiculturalism is an endorsement of learning about other cultures, purportedly leading to the likelihood of mixing with other races. This reportedly leads to deprovincialisation, which is a thesis proposing that "intergroup contact broadens cultural horizons of majority members by putting their taken-for-granted cultural standards into perspective and distancing them from their in-group" (Verkuyten *et al*., 2010, p. 401). This can even occur through extended contact. Wright, Aron, McLaughlin-Volpe and Ropp's (1997) extended contact theory holds that people's prejudice will be reduced through vicarious contact with other groups; that is, if people that they know have contact with other groups then their own prejudice will be reduced. Many authors have explored this phenomenon with some apparently conclusive findings that extended contact is a significant variable (e.g. Christ *et al*., 2010; Tausch *et al*., 2011).

In discussing the classic literature on the contact hypothesis, Durrheim and Dixon (2005) state that relationships pertaining to contact and prejudice have been tested and retested. In contemporary work on intergroup contact, however, researchers have been less concerned with

showing that contact works and more concerned with *when* it works and *how* it works, as in the various influences of moderators and mediators, respectively (Hewstone & Swart, 2011). Researchers have also become more sensitive to how people interpret and make meaning from contact situations with other groups (Leibowitz, Rohleder, Bozalek, Carolissen, & Swartz, 2007). This has caused a surge of literature on mediating and moderating influences on the contact-prejudice relationship which has led to the identification of multiple complex associations. For example, Pettigrew and Tropp (2008) found that increased positive affect such as empathy and perspective-taking and decreased negative affect such as anxiety were powerful mediators of intergroup contact effects; and also found learning or knowledge about the out-group to be a significant mediator (albeit less so than the formerly mentioned two). However, some authors' findings have not been as conclusive. For example, Vezzali, Giovannini, and Capozza (2010) found only partial mediation effects for the popular mediators of anxiety and empathy in their study and suggest that there may be other additional mediating factors.

It has been established that multiple moderating factors can also play a role in the relationship between contact and prejudice. For example, Skipworth, Garner, and Dettrey (2010) found that people's political, religious, and cultural orientations caused contact effects to vary in their contact study with homosexual and non-homosexual groups. Another example of a moderating influence is the extent to which people believe that members of the out-group will perceive the clarity of their intentions to be friends, often believing that their worries regarding rejection will be obvious and taken into account by members of the out-group. This "signal amplification" causes "misunderstandings surrounding individuals' efforts to reach out across group boundaries" (Vorauer, 2005, p. 1653). However, the biggest moderating influence is arguably the effect of group status – Tropp and Pettigrew (2005) found that the combined effects of contact and prejudice vary in relation to whether the groups have minority or majority status. This has been confirmed by many researchers (see Pettigrew & Tropp, 2006). Barlow *et al*. (2013, p. 1), for example, state that "[f]or traditionally disadvantaged minority group members, the association between contact and out-group attitudes is less clear and consistently less strong".

2.4. Interracial Contact Literature in South Africa

Contact between various race groups has been critical in the New South Africa. Finchilescu and Tredoux (2010) note that there are indications that the former hierarchies of race (with Whites at

the top and Indians, Coloureds and Blacks being subordinate groups) are ceasing to exist. This, together with increased interracial contact has led to a change in the race-based attitudes and behaviours of the various groups (and by extension, changes in identities and subjectivities with regard to race). There is a vast amount of literature on South African interracial relations. The effect size for the contact–prejudice relationship in recent research on intergroup contact in South Africa is generally higher than the effect size of r = -.21 reported in Pettigrew and Tropp's famous meta-analysis (Dixon, Durrheim, Tredoux, Tropp, Clack, & Eaton, 2010). Studies with large samples of respondents (e.g. Gibson, 2004; Tredoux & Finshilescu, 2010) have produced significant support for a reduction in prejudice through contact. Even where sample sizes have been small, significant contact effects have emerged, such as in the study by du Toit and Quayle (2011), who found that having contact with mixed-race families had a major effect on people's prejudice levels. Prejudice reduction through contact has also been observed in South African youth. A study by Holtman, Louw, Tredoux and Carney (2005) used regression models to demonstrate that the most critical predictor of race attitudes in school-aged children was contact, even when variables of socio-economic status, school demographics, and participants' racial identification were added to the model as potential moderators.

As with contact literature in general, various mediators in the contact-prejudice relationship have been established in South Africa. Dixon *et al*. (2010), using Black participants only, found that contact was generally related to lower levels of perceived discrimination against the Black race group as a whole, but this was mediated by the contact experiences and racial attitudes of the participants (the quality of contact with whites moderated the effect of the relationship between contact and perceived discrimination). The study on mediators by Tredoux and Finchilescu (2010) is extremely comprehensive, incorporating six mediators and two measures of prejudice. Five of the mediators were found to have an effect (the sixth mediator, Amount of Contact, had no mediation effect on any outcome measures): the mediators of Intergroup Anxiety and Poor Quality of Contact were found to be significant on the two indicators of prejudice (Affective Prejudice and Social Distance) for both white and black participants; Negative Metastereotypes were significant mediators for both white and black participants on the measure of Affective Prejudice; In-group Identification and Out-group Blame were significant mediators on both measures of prejudice for whites only (with Out-group Blame also being a significant mediator for blacks on the Social Distance scale). These results show that there are differential outcomes for blacks and whites on different scales in 3 of the 5 significant mediators, thus highlighting the complex interactions taking place amongst the variables of race, contact, prejudice, and their

various mediators.

2.5. Complexity of interracial contact research in South Africa

Research on interracial contact is indeed a complex arena for research in contemporary South Africa, perhaps more so than in other countries across the globe. Although apartheid exists as a past structure and government has made an effort to engender a country in which race relations are non-prejudiced, "powerful and parochial norms of interracial prejudice are still commonplace" (Gibson & Claassen, 2010, p. 257). Pillay and Collings (2004), ten years after the advent of democracy, found that out of 433 students at a South African University, 242 (55.9%) reported a total of 926 negative, racially-charged experiences (typically involving discrimination). The authors report that their findings support the literature on the resilience of racial attitudes in post-apartheid South Africa. Furthermore, despite evidence that opportunities for interracial contact are rife, some authors have noted that contact alone is not enough in a country in which segregation was enforced for so long (e.g. Fischer, 2011), and that segregation still happens on a microscale. For example, Durrheim and Dixon (2005) mapped out the spatial segregation patterns on a beach in Durban, and noted that despite the fact that the area was inhabited by people from different race groups, people adhered to their own racially homogenous groups. Similarly, Tredoux and Dixon (2009) observed that although there was racial diversity in the nightclubs on a popular street in Cape Town, people generally stuck to interacting with members of their own race groups. This affirms the assertion by Tredoux and Finchilescu (2010, p. 291) that "mere proximity or spatial contiguity is not enough to induce face-to-face interaction" and once again indicates that interracial contact is a complicated social affair in a nation encumbered by past injustices.

Finchilescu and Tredoux (2010) notice three major trends which further confirm the complexity of contact research in South Africa. The first point the authors propose is one that has been mentioned in previous sections, which is the well-established practices of self-segregation. The second point is about the anticipated unevenness in how the different race groups will adjust to desegregation. The third and final point is about the possible paradoxical effects of contact between race groups. All of these points are said to indicate how complex interracial contact can be. Their first point is self-explanatory and has been touched on in the previous section (such as with the beach and nightclub studies). However, an important note should be added to this: it is likely that self-segregation may be the *effect* of interracial contact as opposed to the

cause of limited interracial contact (Finchilescu & Tredoux, 2010). This introduces the sometimes paradoxical nature of intergroup contact in South Africa, which was the third point made by Finchilescu and Tredoux (2010). Indeed, Erasmus (2010) cites 9 studies done in South Africa which challenge Allport's notion of reduced prejudice under optimal contact conditions and suggest instead that contact between race groups can actually be a source of interracial conflict. This is not surprising given South Africa's circumstances; circumstances in which memories of oppression still abound and the formerly minority-status group now has political dominion (Finchilescu & Tredoux, 2010; Gibson & Claassen, 2010). This relates to the second point above regarding asymmetries in adaption to desegregation.

In the general contact literature reviewed previously, one important moderator for intergroup contact was minority and majority group membership. Finchilescu and Tredoux (2010) note the importance of the fact that Blacks are in the numerical majority despite having had minority *status*. This, as well as the flux of racial hierarchies; and uneven political and economic power, means that many Black South Africans have not experienced material transformation. The apartheid economic structure is still largely functional, with the impoverished majority being Black as the government has failed in its attempt to redress economic inequality (Seekings & Nattrass, 2005). Such imbalances make it difficult to discern whether intergroup contact in South Africa will support present contact models and research (Finchilescu & Tredoux, 2010).

2.6. Society, the Individual, and Race

Perhaps one of the greatest issues in contact literature is the separation of the individual from the collective; or its functional opposite: collapsing individuals into the collective. In some ways, this makes sense. For example, Finchilescu *et al.* (2007, p. 723) note that prejudice "can emerge from socio-cultural factors or from more deep-seated personality factors". Sonn and Fisher (2003) claim that oppression occurs at the level of the individual and of the group, with individuals adapting to oppression in different ways. Racial practices have also been noted as being simultaneously individual and collective: "They are performed by individual people, but in ways that are informed by shared social conventions" (Durrheim *et al*., 2011, p. 83). These three examples of the operation of prejudice, oppression and practice show that society and the individual cannot be conceived of as distinct from each other. However, there are times when groups or "the collective" emerge as being most salient in research findings, and other times when the individual comes to the fore as the most decisive variable of study.

There have been a number of studies which have revealed differences in perceptions between race groups regarding contact. One well-established example already previously mentioned is Tropp and Pettigrew's (2005) finding that majority and minority groups may respond differently to intergroup contact given their different histories in that particular society. Another example is that of Finchilescu *et al*. (2007), who found discrepancies between reported race groups on various items. These items pertained to reasons for not mixing with other groups. This was particularly the case on the belief that associating with white people meant dissociating from black people (the reverse sentiment was nowhere near as strong). Furthermore, discrepancies in racial attitudes between groups have been demonstrated between Blacks and Whites (Tredoux & Finchilescu, 2010) and amongst Blacks, Whites, Indians, and Coloureds (Gibson & Claassen, 2010). Such findings suggest that there is not a general attitude shared by the masses which may account for why people are not making contact with those of other race groups, but that people have different reasons for this based on their different cultures, histories, and experiences.

When it comes to individuals, Durrheim and Dixon (2005, p. 153) believe that "[t]he immediate agent of segregation has shifted from the state, to the individual citizens who exercise their preferences in the myriad contexts of impending racial contact in the diverse arenas of their everyday lives". As people navigate their daily activities, their backgrounds and experiences will interact to produce personal accounts of interracial contact. Norris *et al*. (2008) draw attention to the fact that through South Africa's racial stratification, development of identity in adolescents (who make up the bulk of the sample in the current study) will most likely be heterogeneous depending on the influence of the legacy of apartheid on the racial groups of the adolescents. The psychological impact of prejudice has also been found to differ for individuals (Tropp, 2003), and "it is the subjectively perceived importance of contact that largely mediates intergroup contact's reduction of prejudice" (van Dick *et al*., 2004, p. 20). Additionally, in a study on interracial contact in a school, it was found that the gross amount of contact had a weak impact in comparison to the significance of the measures of contact at the individual level (Holtman *et al*., 2005).

2.7. The problem with contact theory in South Africa

Although it has categorically been established in the South African literature on contact that

contact can lead to a reduction in prejudice, it must be acknowledged that "contact between race or ethnic groups in South Africa is complicated, and that a drive to promote better intergroup relations through simple exposure seems unlikely to succeed" (Tredoux & Finchilescu, 2010, p. 292). There needs to be something more in the research which develops a better understanding of the dynamics of interracial contact in South Africa. We still need to pursue avenues which help us understand the persistence of segregation and how those barriers can come down (Finchilescu, 2005). The patterns of racial interaction in South Africa are far too complex for simple contact models and experimental situations to suffice. Dixon, Durrheim, and Tredoux (2005) quite correctly object to the way in which contact research is generally conducted. They accuse the contact literature of being detached from (and even irrelevant to) the common segregation practices of everyday life, arguing that in "reducing contact to a list of formal and ideal dimensions" (p. 702) much of the ideological meanings and effects of contact are lost. This view is supported by this author.

Dixon *et al*. (2005) note the frequent use of post-experimental scales or formal questionnaires to evaluate participants' subjective interpretations of contact situations. Their evaluative stance is both legitimate and concise:

> An advantage of this methodological approach is that it allows researchers to classify and compare the experiences of large numbers of respondents and provides useful information about the broad features of social relations in a given society. A disadvantage, however, is that participants' own concepts of contact are quietly subsumed by concepts grounded in the academic literature on the contact hypothesis. By necessity, the meanings that participants themselves attribute to their encounters with others are translated into a set of general categories that correspond to the ideal forms of interaction proposed by Allport (1954) and successive generations of researchers (Dixon *et al*., 2005, p. 701).

These authors and others (e.g. Durrheim *et al*., 2005; Durrheim *et al*., 2011) argue for a more discursive and ethnomethodological approach to contact due to the shortcomings of quantitative approaches. However, Q-methodology is a reasonable alternative to these approaches. Q-methodology can examine "participants' own concepts of contact" and still has the advantages of quantitative approaches described by Dixon *et al.* (2005) in the above excerpt.

2.8. Conclusion

Race relations have been identified as an area of specific sensitivity for intergroup relations in South Africa. Due to the omnipresence of its segregated history, South Africa is still a largely divided society and the barriers to segregation continue to stand, misunderstood and resistant to collapse. The relationships between contact and prejudice are extraordinarily complex, and there is massive variability in how race is managed (Durrheim *et al*., 2011), making it difficult to understand where redress of interracial relations can possibly begin. Researchers are in over their heads and neither empirical nor qualitative methods have been sufficient to develop a working model of change in racialised South African society. Although the work that has been done on the contact hypothesis is a helpful framework for understanding intergroup relations; the need for a better *understanding* of interracial contact is indicated. Perceptions need to be measured in order to capture the individual and collective meanings given to interracial contact in a way that is sensitive to the complexity of the dynamics of interracial contact. Q-methodology is a good way to do this.

Chapter 3: Q-Methodology

3.1. Q-methodology as a way forward

In preceding sections, I have made the case for the need for perceptions about interracial contact to be explored. Researchers need to "place a greater emphasis on how group members' accrued histories of social experiences may also contribute to their feelings toward cross-group interactions" (Tropp, 2003, p. 144). Tropp and Pettigrew (2005b, p. 956) affirm this by stating that "researchers need to grant greater attention to the perceptions and experiences that are likely to inform group members' conceptions of their intergroup relationships". All of this, coupled with the various claims made in subsections of the literature review by authors of race research, points to the need for a method which gives individuals the opportunity to express themselves in a subjective way which allows for attitudes, experiences, perceptions and feelings about interracial contact to be explored. Many authors note that Q-methodology provides a robust method for measuring these notions, particularly the seminal authors in the field (e.g. Brown, 1980; Stephenson, 1935).

A search of the Q-methodology literature turned up only one study on race (by Neblo, 2009), however this study did not use traditional Q-methodology as the researcher used questionnaires to transpose the questions onto a matrix from which factors of participants were created. However, despite Neblo's (2009) study not being a legitimate Q-study, his results showed not only how individuals shaped their understandings of race in diverse ways but also how "a data-driven taxonomy of perspectives on race politics can elucidate how the topic is more complex than we thought" (Neblo, 2009, p. 33). This is a major testament to the use of Q-methodology in this project given the emphasised complexity of contact research, especially in South Africa.

3.2. Overview of Q

A study employing Q-methodology can be used in any research which seeks to uncover beliefs, attitudes and opinions of people on a certain topic (Brown, 1980). To date, studies on Q-methodology have been performed in all kinds of research fields, for example, in health (e.g. McParland, Hezseltine, Serpell, Eccleston & Stenner, 2011, on constructions of justice and injustice in chronic pain); identity (e.g. Rongmuang, McElmurry, McCreary, Park, Miller, & Corte, 2011, among young adult women in Thailand); journalism (e.g. Giannoulis, Botetzagias, & Skanavis, 2010, on newspaper reporters' priorities and beliefs about environmental journalism);

and parent-child relationships (e.g. De Mol & Buysse, 2008, on understandings of children's influence in parent-child relationships). Brown (1980) also illustrates a number of applications that Q-methodology has in politics and promotes the use of it in all areas of social science.

Q-methodology was first expounded and developed by William Stephenson (Stephenson, 1935) as a method for exploring people's subjectivities around various topics. These subjectivities are explored in a *systematic* way, which allows individuals to make sense of complicated social concerns from their own perspectives (Brown, 1993; Stainton Rogers, 1995) with a certain amount of structure. In doing a Q-study on some topic, "it can show us the particular combinations or configurations of themes which are preferred by the participant group" (Watts & Stenner, 2005, p. 70). Once people have given their viewpoints on a particular topic in a Q-study, personal profiles are correlated, which reveals shared perspectives or segments of subjectivity between or amongst individuals (Brown, 1993). In this way, consensus in people's subjectivities are identified (van Exel & de Graaf, 2005). These correlations are then subject to a by-person factor analysis (as opposed to a by-item factor analysis as is the case in traditional R-methodology – see section 3.4. below) and factors are interpreted by looking at the items which subjects have ranked similarly. There are several steps involved in a Q-methodological study. Although various authors (e.g. Brown, 1980) have outlined different numbers of steps, the five steps given by van Exel & de Graaf (2005) best delineate the processes involved in a study using Q-methodology. The steps that these authors give are: developing the concourse, producing a Q-set, selecting a P-set, having participants do the Q-sort, and analysing and interpreting results.

3.3. Data collection in Q-studies

The concourse is (ideally) the full amount of statements that people can make surrounding the topic under investigation, also described as a 'universe' of all possible opinions on the topic (Brown, 1980). All kinds of sources can be used to find these statements, including experiments (any finding from an experimental study can be translated into an item that could possibly be used in a Q-study on the same topic), the general literature, interviews, questionnaires, and media resources (Dziopa & Ahern, 2011). Once a concourse has been generated, representative items need to be extracted to form the Q-set, which is "a representative miniature of the concourse" (van Exel & de Graaf, 2005, p. 5). The researcher can either impose a theory upon which to derive the final set of statements to be used; or the final selection can be based

on the kinds of items which are produced (van Exel & de Graaf, 2005). Stainton Rogers (1995) states that between 40 and 80 statements is normally sufficient for a Q-study, although Dziopa and Ahern (2011) found that the amount of items used in the studies in their meta-analysis ranged between 27 and 82 items. However many items are used, the final statements should broadly represent the opinions around the given topic (Watts & Stenner, 2005).

Watts and Stenner (2005) suggest that a large number of items should initially be included. Academics experienced in the field of study can be approached to comment on the concourse and help select items. When it comes to reducing the concourse to the final set of statements (Q-set), items should be organised based on useful ways of thinking about the types of statements elicited. Categories of statements can be determined which are functionally different from each other and then statements as different as possible from each other should be placed into each relevant category to ensure that there is a representativeness of items (Brown, 1980). Once the final Q-set has been established, a sample of participants, referred to as the P-set, needs to be generated. The criteria for selecting the P-set is that it needs to have theoretical relevance to the topic being explored and the participants must have viewpoints about the topic (Brown, 1980). It is not necessary that large amounts of participants be used in a Q-study (Watts & Stenner, 2005) since the way that participants do the Q-sort is what is important, not the sample of participants or its size (Brown, 1993). Stainton Rogers (1995) does, however, suggest that between 40 and 60 individuals is effective to elicit the main viewpoints of various groups of people. When smaller numbers of participants are used (such as 40 to 60) the quality of the study is maintained and "pattern and consistency can still be detected within the data" (Watts & Stenner, 2005, p. 79).

Once the P-set has been found, the next step is the Q-sort. The Q-sort is the process by which participants give meaning to the items in the Q-set. The items for the Q-sort are given to participants in a pack of randomly numbered cards, with one item per card. Participants must then rank the items on a continuum according to personal significance of items. Those with least personal significance will have the lowest ranking while those with the most personal significance will have the highest ranking (Watts & Stenner, 2012). Although the ranking is from least personal significance to most personal significance, the continuum indicators are typically verbally expressed by using "most" to "most", for example "most untrue" to "most true" or "most disagree" to "most agree". The continuum is in the form of distribution (usually a quasi-normal distribution – see Figure 2 below for an example), based on a condition of instruction which

explains how participants should rank the items (Brown, 1993). Where the distribution used is concerned, it makes very little difference to the final analysis what the shape of the distribution is (Brown, 1980), however researchers often use a forced distribution such as the one in Figure 2 because it "delimits unnecessary work and because it is convenient for their participants" (Watts & Stenner, 2005, p. 77). Typically, 13 or 11 point scales are used, ranging from -6 to +6 or -5 to +5 respectively, with a zero value in the middle of the distribution (Watts & Stenner, 2005). The "range of the scale is specific to the research question at hand" (Dziopa & Ahern, 2011, p 49) and is largely determined by the number of statements in the Q-set, with larger numbers of statements having a larger range (Brown, 1980). Thus, size of the scale for this study is determined by the size of the Q-set.

Figure 2. An example of a Q-sort distribution

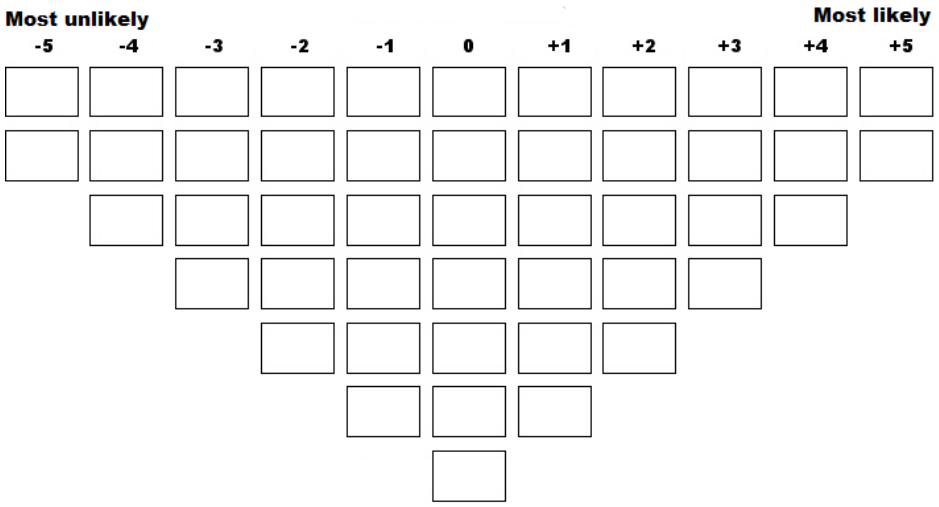


Figure 2. The distribution ranges from most unlikely (-5) to most likely (+5)

3.4. Analysis and Interpretation in Q-studies

The analysis employed in Q-methodology is a factor analysis. It is possible to use z-scores (this has been cited as a matter of preference; Dziopa & Ahern, 2011) but factor analysis has most widely been used. In order to facilitate an understanding of the factor analysis involved in Q, it can be compared to the traditional R-methodological approach. In the R-methodological approach, a set of items from a scale is correlated and this is subjected to factor analysis, which reveals clusters of items that explain a certain amount of variance in the population. In a Q-

methodological approach, it is the participants who become the 'items' and the items which become the sample. Thus, "factor analysis is carried out on a by-person rather than a by-item basis" (Watts & Stenner, 2005, p. 89), the latter being the analysis in R-methodological approaches; and Q-study results describe populations of viewpoints as opposed to populations of people as in R-studies (Risdon, Eccleston, Crombez, & McCracken, 2003).

The factors obtained from the analysis "indicate clusters of persons who have ranked the statements in essentially the same fashion" (Brown, 1980, p. 6). What the correlation does is illustrate which pairs of Q-sorts resemble each other and what the factor analysis does is reveal more general family resemblances or types of people (Brown, 1980). The type of factor analysis used depends on the researcher's preferences and what theories might exist prior to analysis. The most common method employed when a theory is used to drive selection of factors is the centroid method (Brown, 1980). The freeware statistical program PQMethod (version 2.33; Schmolck, 2012) was specifically developed for Q-methodology and employs the centroid method for factor analysis as its default. The researcher can then proceed with rotation. A varimax rotation makes most sense mathematically (Watts & Stenner, 2005); although different types of rotations can be done if the data indicates that they would be most logical.

Once factors have been obtained, the researcher must decide which factors to select to be interpreted. Two standard judgements are that factors should have an eigenvalue greater than 1.00 and at least two Q-sorts should load significantly on a factor (Watts & Stenner, 2005). Caution must be taken here as factors without statistical significance may be uncovered and factors with great theoretical importance may not be uncovered using these judgements. It is also possible to use the newly-introduced Horst's criterion, which was programmed into PQMethod following irregularities found when using Brown's method. This criterion does not use eigenvalues to select factors but rather uses an equation which selects factors based on limiting levels of residual correlations (Schmolck, 2012). Once factors have been established, the researcher then interprets them by exploring the attitudes advanced by those who load on each factor. Factor interpretations necessarily employ the subjectivity of the researcher, however the researcher is still constrained by the actual results and interpretations should be accurate reflections of the data which emerge in the results (Brown, 1980). Once the researcher has explored and interpreted the various factors, the findings should be complemented by comments from participants about the Q-set and Q-sort, allowing for a clearer interpretation of each factor: "These processes complement each other, the Q-factors by imposing discipline on

the imagination of the researcher, and the interpretive methods by guarding against fetishizing technique over meaning and utility" (Neblo, 2009, p.34). Comments can be obtained in various ways such as by interviews or open-ended questionnaires, and can be taken from all participants or from participants who best exemplify each factor (Watts & Stenner, 2005).

3.5. Reliability and validity

The concept of validity is largely irrelevant to a Q-study (Brown, 1980). External validity cannot be appraised given that individual perspectives are at the heart of the Q-study and a decision cannot be made regarding whether an individual's viewpoints are valid or not (Brown, 1993). A possible validity concern is the bias of the researcher in the interpretation stage (Cross, 2005); however the interpretation can be cross-checked with follow-up interviews. Although this method of triangulation may also introduce bias, this issue is not unique to Q-methodology as interpretation of interviews occurs in most forms of qualitative data analysis. Another source of bias which could threaten validity is in the selection of the Q-set, but this is managed through consultation with various professionals in the topic of study. The only reliability concern is factor reliability. Factor reliability is based on the amount of Q-sorts, average reliability of Q sorts, as well as the standard error of factor scores, a calculation built into PQMethod. Reliability scores provide what can be considered an index of how much confidence can be placed in the factor (Brown, 2003b) and a score above 0.95 is decent reliability score which is generally generated by 5 or more participants defining each factor (Brown, 2000). This means that if factors have five or more people, reliability should not be a concern. Test-retest reliability is not an issue since "Q-methodology makes no claim to have identified viewpoints that are consistent within individuals across time" (Watts & Stenner, 2005, p. 85).

3.6. Summary

"*Q-methodology*" refers to a unique approach to the measurement of people's subjectivities which relies on factor analysis to extract clusters of people who think alike on the topic at hand. A "*concourse*" is a large and diverse set of statements which represent the entirety of what can be said on a given topic. The "*Q-set*" is the final set of statements which are a fair summary or representation of the statements in the concourse. A "*Q-sort*" is the actual process of sorting the statements in the Q-set on a "*distribution*". The distribution is a template on which participants organise their items. It often looks similar to a normal distribution and generally ranges from a most to most, for example "most disagree" to "most agree". The Q-sort is arranged according to

a “*condition of instruction*” which indicates how participants should rank their items and directly implicates the topic under investigation. In Q-methodology the participants are known as the “*P-set*” for theoretical reasons stemming from the difference between Q-methodology factor analysis and traditional R-methodology factor analysis. Basically, in traditional R-methodology factor analysis, a sample of participants answers items on scales which are factor analysed through exploratory and/or confirmatory factor analysis; whereas in Q-methodology the factor analysis is a kind of inversion of this practice as it is done on the participants with the sample referring to the items. “*Factors*” are thus groups of people who have ranked the items in similar ways (Brown, 1980).

Chapter 4: Methods

4.1. Summary of Methodology

Ethical clearance for the study was obtained prior to the commencement of the study procedure (see Appendix A for the clearance certificate). The concourse for the study was drawn from multiple sources then it was refined in a logical manner and experts were consulted to help compile the final set of statements. This resulted in a final Q-set of 56 items. The sample was 55 volunteer students from the University of the Witwatersrand who were taking a first year Psychology course. A Q-sort distribution ranging from -6 (most disagree) to +6 (most agree) was drawn on a large piece of white cardboard for the Q-sort to take place. Participants completed their sorts one by one and each participant gave a follow-up interview before leaving. PQMethod was installed to analyse the sorts using a centroid factor analysis with Horst 5.5 with iterative solutions for communalities. Four factors emerged and a varimax rotation was used on all four factors. Both characterising and differentiating items were used in the analysis and interpretation of factors.

4.2. Concourse

The concourse for this study was derived from multiple sources. Accessing opinions took the form of indirect and direct methods. Indirect methods included using the literature on contact, two South African scales on contact, newspapers, and internet sites that involved chats or posts about race and/or race relations. Books and articles about intergroup contact or race were perused and direct statements from these sources were added to the concourse, or findings from research were adapted into item form and added to the concourse. The Duckitt Scales (Duckitt, 1991) and the scale used in Finchilescu *et al*. (2007) were scrutinised and appropriate items were adapted and included in the concourse. Two relevant newspaper articles were found during concourse item collection and statements were derived from them for the original concourse. The internet was searched using the terms African, White, Indian, and Coloured with the additional search phrase of “AND South Africa”. Derogatory and stereotypical terms often associated with these groups were also searched. . Various sites such as blogs and online news pages were scanned for statements about race in South Africa. Potentially useful statements were added to the concourse.

Direct methods included an informal questionnaire, two focus groups, and recording comments overheard in everyday conversations. The informal questionnaire was on one full side of an A4 piece of paper and had the following two questions followed by 11 lines for answering: “What are some of the reasons South Africans don’t make contact with other race groups?” and “What are some of the reasons South Africans make contact with other race groups?” Ten of these questionnaires were returned. The focus groups involved informal discussions surrounding these two questions. There were five participants in the first focus group (three black, two white) and four in the second (one black, three white). Both the informal questionnaires and the focus groups were done with volunteer participants from the A Level College where the researcher lectures. All participants were over 18 and read the Participant Information Sheet (Appendix B), and signed a consent form (Appendix C). Observations and comments with relevance to the study were included in the concourse. In attempting to generate an even more diverse concourse, any race-related comments made by individuals over the time span of concourse collection were recorded for potential use. Comments were overheard in and around Johannesburg as well as in and around Cape Town. A full list of the original concourse items and their sources is contained in Appendix D.

4.3. Q-set

Collection of the concourse ceased after what I called “item saturation”. I considered the concourse as being saturated after 198 statements when no new items were being generated and old items were being repeated. At this point, the concourse was divided into ten sections under headings relevant to the items. Items very similar in nature were removed (the one which appeared to be most clear or simple was retained) along with stereotypes or items which referred to specific race groups. Further items were removed if they did not make sense. Some items were collapsed to create one general idea. This narrowed down the concourse to 67 items. These 67 items were then sent to two professionals in race-based research who gave their recommendations. From these recommendations, the Q-set began to take form. A major recommendation was to have as many items containing facilitating influences for interracial contact as there were items containing inhibiting influences for intergroup contact, with the inclusion of neutral influences (influences not related exclusively to race). This is how the final Q-set was established. These categories of items are hereafter abbreviated to facilitating items, inhibiting items, and neutral items.

An example of a facilitating item is, “Mixing across races is easier when people speak the same language”. An example of an inhibiting item is, “People are anxious about interacting with people of other race groups”. An example of a neutral item is, “People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups”. Following the division of items into facilitating, inhibiting, and neutral influences, the Q-set was then taken to an expert in social psychology and Q-methodology who then assisted in collapsing similar items into one overarching item and refining items to avoid confusion. The final Q-set contained 56 items and can be found in Appendix E.

4.4. Sample

The sample for this study consisted of 55 students from the University of the Witwatersrand. All students were members of first year Psychology classes and all had lived in South Africa for at least five years. Only three students were not from South Africa and all three came from other countries in Africa. There were 18 males and 37 females. There were 24 Black, 21 White, 8 Indian and 2 Coloured people in the sample. In terms of languages; 30 spoke English, 3 Afrikaans, 7 IsiZulu, 4 IsiXhosa, 3 SeSotho, 1 SePedi, 3 Setswana, 1 SiSwati, and 1 Xitsonga. Two others spoke different languages (these two were from Zimbabwe, still included in the sample as they had been in South Africa for at least 5 years). Of the total sample, 48 students were in their first year of study, 6 were in their second, and 1 was in his third. The mean age of participants was 20.29 years with the median being 19.42. Age ranged between 18 years and 33 years. Most participants (38) were 18 or 19 years old.

The sample for this study was a non-probability convenience sample of volunteers. Participants were acquired in two ways. An email was sent to all first year students asking for participants for a Q-methodology study on perceptions of interracial contact. From this email, 43 participants ultimately replied and took part in the research. A further 12 were spontaneous volunteers who were participating in a colleague’s research next door to the research room and decided to participate in my research on the spur of the moment following an offer to participate by either my colleague or me. All participants received 1% course credit for their participation.

4.5. Measures

The final Q-set was printed out item by item in black in a large font on white paper, then each item was cut into a rectangle and glued to an orange piece of cardboard. All cards were then

numbered at the back and laminated. The Q-sort distribution was then created by drawing it with a black marker on two large pieces of white cardboard which had been stuck together to create one large board. Each block for each card was the same size as the laminated cards. The distribution had 13 columns ranging from -6 (strongly disagree) to +6 (strongly agree). The layout of the amount of items allowed in each column was (from -6 to +6), 2 2 4 4 6 6 8 6 6 4 4 2 2, which created a somewhat normal distribution. An exact miniature replication of the distribution can be seen in Figure 3 below.

Figure 3. Q-sort distribution

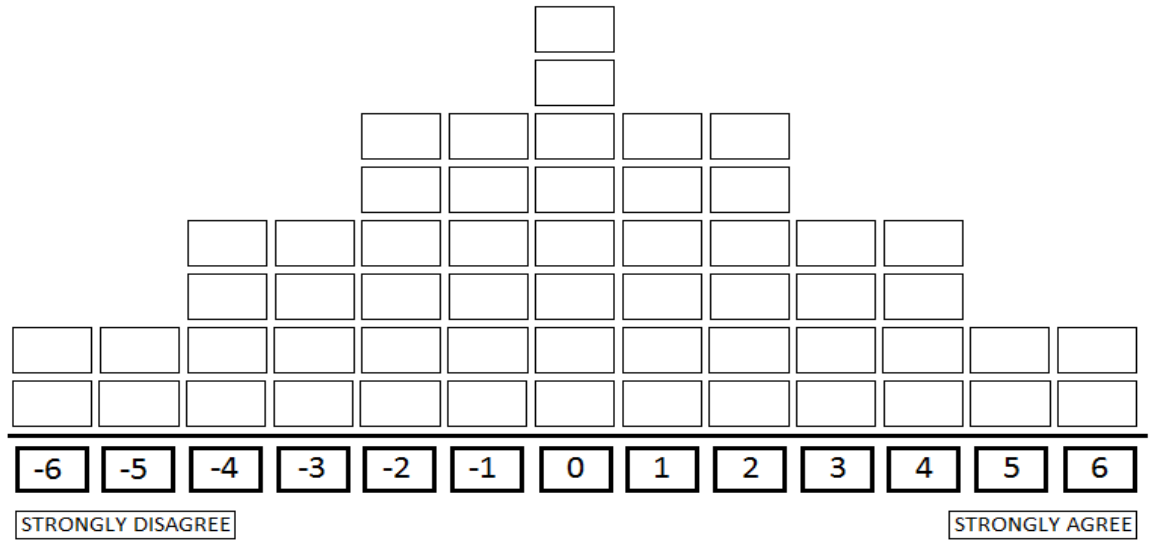


Figure 3. The distribution ranges from strongly disagree (-6) to strongly agree (+6)

4.6. Procedure

Permission was obtained by the Department of Psychology to use a research room in the School of Human and Community Development building. This room was well lit and had a large desk facing the wall on the opposite side of the room to the door. The Q-sort distribution was spread across this desk. A smaller desk and another chair stood against the side wall behind the large desk such that a person sitting at this smaller desk could not see the activities of the participant. Participants took part in the study one by one and were not allowed to bring friends or other companions into the room. When participants sat down they were asked to read the Participant Information Sheet (see Appendix B) and were asked if they had any further questions. Upon agreeing to continue, they then filled out the consent and demographics form

(see Appendices C and F). Participants were shown the stack of 56 cards (each one containing an item from the Q-set). It was explained that each card had an item about which the participant may agree, disagree, or feel neutral. Based on Brown's (1980) recommendations, the participants were asked to read through all the cards first and start arranging them into three piles according to these feelings. They were asked to tell me when they were finished. While they created their piles, I sat behind the participants at the smaller desk and "read" a book to reduce the influence of my presence and hopefully give the participants more liberty to sort the cards into the piles without fearing my judgement.

Once the piles had been created, I returned to the chair alongside the table and used gestures to help participants understand what was expected. I referred them to the condition of instruction on the demographics form (Appendix F) and read it out loud. Participants were informed that the order of the items in the column was not relevant but the order of the items in rows was critical to the investigation. When the participants were comfortable with the instructions, they were told that I would be sitting behind them at the smaller table and reading and that they should let me know when they were finished. This was also to reduce possible discomfort at being observed. Participants were told that there was no time limit. It was clearly stated that they could ask me questions at any time and that it was necessary for them to clarify any concerns that they might have. At least once during their Q-sorts, participants were asked if they were "doing OK"; and their Q-sorts were briefly checked once towards the beginning of the sort to make sure the instructions were understood. If participants tried to make conversation or asked questions that were not relevant to the study, they received the following response: "That's interesting. Let's chat about it as soon as you're done". This was done in an effort not to confound their thoughts during the Q-sort.

Upon participants' completion of the Q-sort, I returned to the chair alongside the table and stated that I was going to switch on my Dictaphone to record the interview part of my data. With the first four participants, I asked the following questions:

1. Why did you rank/order the items in the way that you did?
2. Do you feel like the items covered your range of viewpoints and opinions on this topic? If not, please give reasons.
3. Do you have anything you would like to say or add about this topic or this study?

After the fourth participant, I realised that these questions were not appropriate as they sounded like exam-type questions and participants struggled to answer them directly. There seemed to

be some discomfort about giving reasons for not believing that their range of viewpoints and opinions was covered. Participants also appeared to do a lot of accounting about their personalities and how they didn't realise they had perceived things the way they had exhibited them in their Q-sorts. It was obvious that trying to be a detached observer was not conducive to obtaining the desired responses.

The issues with the interviews were not anticipated. Participants looked rigid and uncomfortable as if under interrogation. A different questioning strategy was thus used and a new set of questions developed. The new strategy was to be informal and use the skills that I had obtained during an advanced counselling course to make participants feel more comfortable, relaxed, and free to talk. Participants were not cut short if their answers were tangential. The counselling microskills of affirmative gestures and silence were particularly effective in encouraging participants to elaborate on their answers. Questions were not always delivered in exactly the same way or the same order but were tailored to the individual and his or her responses to the first question. Broadly speaking, the questions were:

1. So, tell me about your Q-sort. Anything you want to say.
2. Is there anything you think was left out or should have been removed?
3. Is there anything else you'd like to ask or add?

Interviews generally lasted for 2 to 3 minutes. Once participants left, the cards on the distribution were turned over and their numbers recorded on a miniature replica distribution as in Figure 3 above.

4.7. Analysis

PQMethod version 2.33 (used in MS-DOS, compatible with Windows; Schmolck, 2012) was downloaded and used. All items were entered using key words and all 55 sorts were entered. A centroid factor analysis was selected and the option of using Horst 5.5 with iterative solutions for communalities instead of Brown's (1980) method was confirmed. Watts and Stenner (2005, p. 81) state that "several factors with eigenvalues in excess of 1.00 might be extracted even from random data, as random patterns will always arise and be detected". For these reasons, Horst's criterion (Horst, cited in Schmolck, 2012) seemed the superior method for factor extraction. It was checked how many factors passed Horst's criterion and four factors were suggested and selected. A varimax rotation was then ordered with all four factors rotated. The flagging option was chosen and automatic pre-flagging was done. All factors were retained and saved. A final

analysis was then requested which successfully exported the results. The z-score cut offs for statements used in factor interpretation was >1 and <-1 since “[s]tatements with a z-score larger than 1 (or smaller than –1) are referred to as *characterizing* for that factor” (van Exel & de Graaf, 2005, p. 19).

Chapter 5: Results

5.1. Summary of factors

During factor analysis, an iterative process takes into account all the Q-sorts to produce factors on which sorts have a high degree of association. This serves to increase the amount of pure loadings on original factors (McKeown & Thomas, 1988). A pure loading occurs when a Q-sort loads on one factor only as opposed to more than one factor. It is these pure loadings which must be presented in order to estimate factor scores and provide focus of viewpoints in each factor (Brown, as cited in du Plessis, 2005). Participants who have "idiosyncratic" points of view (do not load significantly on any factor) are not included in analysis as per Schmolck's (1998) suggestion of excluding such participants. In this analysis a total of 42 out of 55 people loaded significantly on one of the four factors. Since PQMethod uses automatic flagging software to identify significant sorts, bias by the researcher regarding what constitutes a significant sort was eliminated. Fifteen people loaded on Factor 1, with Factors 2, 3, and 4 having seven, twelve, and eight people loading on them, respectively. The viewpoints of 13 participants were idiosyncratic and were not included in analysis. This process yielded composite reliability scores for the factors between 0.966 and 0.984 (see Table 2 below). These reliability scores are more than acceptable since Brown (2000) purports that a good reliability score is .95 or above.

Table 2

Composite reliability scores for each factor

Factor	**1**	**2**	**3**	**4**
Composite reliability	0.984	0.966	0.980	0.970

In terms of variance, Factor 1 explained 10% of the variance, Factor 2 explained 7%, Factor 3 explained 10%, and Factor 4 explained 9%. Any more factors would explain less of the variance; and when three factor models were run (using both Horst's and Brown's methods), the cumulative variance explained by the model was less than the 36% acquired by the current four factor model. Thus, 7% was considered acceptable as the lowest proportion of variance explained. Furthermore, while Brown (1980) proposes that the researcher should take more factors than anticipated to the level of factor rotation in order to preserve variance and suggests extracting 7 factors, and although Q-methodology software usually extracts 7 or 8 factors to guarantee enough variance in each factor; only 3 or 4 factors generally have any value (du Plessis, 2005). The total percentage of variance explained by the four factors may be

considered low by some researchers; however the four factors were retained as the maximum amount for the reasons outlined above which are all essentially for the sake of parsimony.

A factor array for each factor is calculated in PQMethod. A factor array is a composite representation of how the average Q-sort would look for that factor. The factor arrays according to Q-sort values are given in Appendix G. It is not common practice to interpret each item, however some items relevant to the literature review are discussed in the next chapter (Chapter 6: Discussion). It is important to note that given the range of the distribution in this study (-6 to +6), Q-sort values for all factor arrays which are between approximately -2 and +2 are regarded as neutral. Q-sort values of -5, -6, +5, and +6 are the ones which yield z-scores below -1.5 and above 1.5 in this study.

5.2. Correlations between factors

Effect sizes for correlations between factors were small to moderate (see Table 3), with some correlations approaching large according to Cohen's effect size criteria for correlations (0.1 = small, 0.3 = medium, 0.5 = large). It should be noted that these are only general indicators and must be considered within the context of each study (Huck, 2009). The fact that two correlations between factors approached large effect sizes is not considered a problem in this study. Logically speaking, it is quite impossible that all factors will be independent in a Q methodological study. It is entirely likely that some statements in the Q-set may all be strongly agreed with or disagreed with (see discussion on "accents" item below). It must be borne in mind that in traditional R factor analysis, predefined items or statements are correlated to produce factors whereas in Q factor analysis, *people* are correlated to produce factors and deriving neat or pure clusters of people who are not correlated with any other clusters of people is almost (if not totally) impossible. Correlations are thus to be expected.

Table 3

Correlations between factors and their effect sizes according to Cohen's criteria

Factors	**1 and 2**	**1 and 3**	**1 and 4**	**2 and 3**	**2 and 4**	**3 and 4**
Correlation	0.3117	0.3919	0.4696	0.4522	0.2060	0.3695
Cohen's criteria	Moderate	Moderate	Moderate to large	Moderate to large	Small	Moderate

There are several reasons why correlations may be quite large relative to the desired low correlations in traditional factor analysis studies. On a large scale, accounting for all correlations in general, one of these reasons is that there were some items which people in all four factors seemed to rank similarly (Table 4). For example, the “accents” item (“It is often the accents of people from other races that prevents different race groups from mixing”) was disagreed with in all four factors, with Factors 1, 2, and 3 having z-scores lower than -1.5 and Factor 2 having a z-score of -1.154 for this item. The relative Q-sort values (Q-sort values can be understood as average rankings of items in each factor) for this item indicated strong disagreement for all four factors. It is likely that of all the items in the Q-set, the accents item had the least overall value or significance in explaining perceived barriers to interracial contact. This item is probably a poor item for inclusion in the study as the only useful information it has yielded is that accents make very little difference to the perceived likelihood of interracial contact.

Three other items which had Q-sort values all fall on the disagree side for each factor but with less salience than the “accents” item were, “Race issues always come up when people mix across race groups”, “People don't mix across races because they fear that members of their own race will disapprove of them” and “People want to retain their racial identities so they don't want to mix with other race groups”. There were two items which emerged as significant neutral consensus items and did not significantly distinguish any factors from each other. They were “Adopting traditions and activities from other race groups improves relations between races” and “Mixing across races is easier when people speak the same language”, whose z-scores fluctuated around 0 on every factor. There were six items for which all factors had positive Q-sort values. These were “The current youth of South Africa are much more likely to mix across races than older people”, “The use of offensive names to identify other race groups inhibits interracial mixing”, “Blaming other race groups for the problems in South Africa inhibits interracial mixing”, “Politicians playing the race card creates divisions between races”, “Being raised in tolerant families makes people more willing to mix with people of other races”, and “Personality plays a big role in whether people will mix across races”. All of these items are presented in table 4 below with their corresponding Q-sort values.

Table 4

Consensus items across factors with corresponding Q-sort values

	Q-sort value			
Item	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**
It is often the accents of people from other races that prevents different race groups from mixing	-6	-4	-6	-5
Race issues always come up when people mix across race groups	-4	-2	-3	-5
People don't mix across races because they fear that members of their own race will disapprove of them	-5	-2	-3	-1
People want to retain their racial identities so they don't want to mix with other race groups	-4	-1	-4	-6
Adopting traditions and activities from other race groups improves relations between races	0	0	0	0
Mixing across races is easier when people speak the same language	1	0	0	0
The current youth of South Africa are much more likely to mix across races than older people	4	3	2	5
The use of offensive names to identify other race groups inhibits interracial mixing	4	3	6	3
Blaming other race groups for the problems in South Africa inhibits interracial mixing	3	5	3	6
Politicians playing the race card creates divisions between races	1	5	6	6
Being raised in tolerant families makes people more willing to mix with people of other races	6	2	3	2
Personality plays a big role in whether people will mix across races	6	1	3	1

Apart from common general agreement and disagreement on multiple items perhaps partly explaining all correlations, there may be more specific reasons for correlations between certain factors. The highest correlations between factors were between Factors 1 and 4 (0.4696) and Factors 2 and 3 (0.4522). A review of these factors shows that Factors 1 and 4 were positive in outlook and Factors 2 and 3 were negative in outlook, which may explain these high correlations. Not only was the content of the interviews in Factors 1 and 4 and Factors 2 and 3 quite analogous, but people on Factors 1 and 4 generally agreed with facilitating items and

disagreed with inhibiting items, while the reverse was true for Factors 2 and 3 (facilitating items are those containing influences that might increase the likelihood of interracial contact happening, while inhibiting items are those containing influences that might prevent interracial contact from happening – see Chapter 4, Section 4.3). Furthermore, Factors 1 and 4 shared five characterising items and Factors 2 and 3 shared four characterising items. This "sharing" of characterising items was common amongst the factors and further explains correlations between factors.

5.3. Factor interpretation

Since there was a large amount of characterising items in each factor (the range being 18 to 21), it would not make sense to discuss all of them as this would clutter the analysis and reduce the quality of interpretations. Thus, in order for an item to be used in the interpretation of factors, it had to meet at last one of the following two criteria: (1) it needed to be an exemplar of the factor, meaning that it had a z-score lower than -1.5 or higher than 1.5 (Shemmings, 2006); or (2) it had to be both a characterising and distinguishing item, where characterising items are those with z-scores lower than -1 and higher than 1 (van Exel & de Graaf, 2005) and distinguishing items are those which have been ranked significantly differently to the way that they are ranked on other factors ($p < 0.05$, calculated in PQMethod). A simpler explanation of this follows.

Exemplars *are* characterising items, but they have particularly strong z-scores: either above 1.5 or below -1.5. These could technically be sufficient in factor interpretation but it would be more comprehensive to include items which make the factors different from each other – in other words, *distinguishing* items. Not all distinguishing items are used because only the distinguishing items which *characterise* each factor is important, since it is characterising items which give an initial idea about the composite views of the factor (van Exel & de Graaf, 2005). These two criteria were therefore selected as they seemed to be the most logical way of interpreting the items since they take items into account on both the dimensions of characterising and distinguishing items as well as the importance of the items with the greatest salience in each factor. Tables of characterising and distinguishing items for each factor are given in Appendix H.

The demographics of all participants loading on each factor as well as the demographics of those who did not load on any factors were scrutinised. None of the variables recorded on the demographics form (race, age, gender, or language) was identified as being relevant in or specific to any factor, nor to the idiosyncratic sorts, as there was a balance of variables broadly representative of the P-set in each factor. Factor one there were 7 Black participants, 2 white participants, 1 Coloured participant, and 5 Indian participants. In Factor 2 there were 3 Black participants, 3 White participants, and 1 Indian participant. In Factor 3 there were 5 Black, 5 White, and 2 Indian participants. In Factor 4 there were 3 Black participants, 4 White participants, and 1 Coloured participant. The interviews of the people who had the highest loadings on each factor were not very helpful in explaining the factor as they simply reaffirmed the way that the items were ranked. The quality of information derived from the Q-sorts themselves was sufficient in creating a picture of the way people perceive interracial contact in each factor.

5.3.1. Factor 1: The Experientialists.

The table below shows the items which qualified for analysis according to the criteria outlined above.

Table 5

Items qualifying for analysis in Factor 1

Statement	**Z-SCORE**	**Distinguishing**
Being raised in tolerant families makes people more willing to mix with people of other races	2.321	Yes
Personality plays a big role in whether people will mix across races	2.183	Yes
The more people are exposed to other races, the more likely they are to mix socially with them	1.664	Yes
People don't deliberately avoid other race groups, it often just turns out that way	-1.089	Yes
The fear of being misunderstood by other race groups prevents interracial contact	-1.601	Yes
People don't mix across races because they fear that members of their own race will disapprove of them	-1.611	Yes
Fears about being called racist prevents different race groups from mixing	-1.633	No
It is largely the responsibility of politicians and leaders to promote racial tolerance	-2.073	No
It is often the accents of people from other races that prevents different race groups from mixing	-2.384	Yes

From the items, it would appear that this factor is essentially defined by the consideration of experience and the effect of the environment as critical facilitators of interracial mixing; as well as the rejection of what those in the out-group may think as a hindrance to interracial mixing. Participants on this factor were termed “The Experientialists” for their apparent view that people will make contact with other race groups relative to their own experiences and characters. The three most prominent items which were agreed with were “Being raised in tolerant families makes people more willing to mix with people of other races” (z-score of 2.321), “Personality plays a big role in whether people will mix across races” (2.183), and “The more people are exposed to other races, the more likely they are to mix socially with them” (1.664). These items seem to indicate that the way a person is raised, including how personality evolves as a result, will play a large role in the likelihood of interracial mixing. The “tolerant families” and “exposed” items in particular emphasise how people in this factor believe that the role of experience is

critical to the likelihood of interracial mixing. These two items were considered facilitating items while the personality item was considered a neutral item.

There were three items related to the rejection of what others think as inhibiting forces amongst the items most disagreed with in this factor. These items were, “The fear of being misunderstood by other race groups prevents interracial contact” (-1.601), “People don't mix across races because they fear that members of their own race will disapprove of them” (-1.611), and “Fears about being called racist prevents different race groups from mixing” (-1.633, not a distinguishing item). These two items can be associated with the item, “It is often the accents of people from other races that prevents different race groups from mixing”, which had the highest of all z-scores (-2.384) in this factor. This makes absolute sense since, for people on this factor, it is about individual experience in life as to whether a person might mix across race groups and not about the properties or aspects ascribed to different race groups, such as accents or what other race groups will think. This item was also a distinguishing item for this factor because of the extent of disagreement with it.

Two other items which were salient in terms of disagreement were, “People don't deliberately avoid other race groups, it often just turns out that way” (-1.089), and more predominantly, “It is largely the responsibility of politicians and leaders to promote racial tolerance” (-2.073). The first of these items seems to indicate that people on this factor believe that people in general will do what comes naturally to them in mixed-race situations based on individual experience rather than consider what social or political forces might influence the contact situation (cf. Factor 3 below). The “responsibility of politicians” item is almost as strongly disagreed with as the “tolerant families” and “personality” items are agreed with, perhaps showing that people on this factor believe that forces involved with interracial contact occur or at least should occur on micro rather than macro levels.

5.3.2. Factor 2: The Ethnocentrists.

People in this factor were easier to describe than those in Factor 1. Table 6 gives the qualifying items for this factor.

Table 6

Items qualifying for analysis in Factor 2

Statement	**Z-SCORE**	**Distinguishing**
People thinking that their race group is superior to other race groups prevents mixing across races	1.985	Yes
BEE (Black Economic Empowerment) is causing a lot of tensions between races	1.767	No
Blaming other race groups for the problems in South Africa inhibits interracial mixing	1.715	No
Politicians playing the race card creates divisions between races	1.638	No
The area of South Africa that people live in will largely determine whether they will mix with other races	1.386	Yes
Cultural differences are one of the main reasons why people don't mix across races	1.292	Yes
Seeing friends interact across race groups makes people willing to do the same	-1.111	Yes
It is often the accents of people from other races that prevents different race groups from mixing	-1.154	Yes
Being at school with people of other races makes people more willing to interact with other race groups	-1.641	Yes
People don't deliberately avoid other race groups, it often just turns out that way	-1.778	Yes
It is largely the responsibility of politicians and leaders to promote racial tolerance	-1.819	No
When people have had the same level of education, race doesn't stop them from mixing with each other	-2.034	Yes

The item with the highest positive z-score in this factor was “People thinking that their race group is superior to other race groups prevents mixing across races” (1.985, also a distinguishing item), which relates to the item with the third highest positive z-score, which was, “Blaming other race groups for the problems in South Africa inhibits interracial mixing” (1.715). These two items show perceived ethnocentric nature of contact relations in this factor, which is largely why this factor has been labelled “The Ethnocentrists”. An item which further supports this label is, “Cultural differences are one of the main reasons why people don't mix across races” (1.292). When considered with the items that people on this factor disagreed with, the

label of “ethnocentrists” becomes clearer. The item most important to people in this factor with regard to disagreement was, “When people have had the same level of education, race doesn't stop them from mixing with each other” (-2.034). This item relates to another defining item: “Being at school with people of other races makes people more willing to interact with other race groups” (-1.641). These items suggest that schooling in general has no influence on willingness to interact with people from other race groups and that cultural differences are larger barriers to interracial contact.

A characterising and distinguishing item which was agreed with was, “The area of South Africa that people live in will largely determine whether they will mix with other races” (1.386). On the surface, this item does not seem to fit with the other items, however this item is plagued with the same kinds of external excuse for avoiding contact, such as two of the items which were exemplars in this factor, namely, “BEE (Black Economic Empowerment) is causing a lot of tensions between races” (1.767), and “Politicians playing the race card creates divisions between races” (1.638). These two items show that politics play an important role in creating problems amongst race groups, however it is important to note that, as in Factor 1, people on this factor strongly disagreed with the item, “It is largely the responsibility of politicians and leaders to promote racial tolerance” (-1.819). This means that for people on this factor, although political moves play a role in interracial contact, culpability for lack of interracial contact is not held by politicians. It is unclear what the suggestion may be here. The suggestion could be that citizens should be responsible for racial tolerance, *or* that nobody should be responsible for racial tolerance, *or* that racial tolerance should not be a force on people.

Two other defining items in this factor are “People don't deliberately avoid other race groups, it often just turns out that way” (-1.778) and “Seeing friends interact across race groups makes people willing to do the same” (-1.111). Both these items reveal a resistance to interracial mixing; and all the items taken together give a negative outlook and suggest that people in this factor believe that racial self-segregation will continue. While there was a difficulty decoding what the “deliberately avoid” item might mean in Factor 1 (it was not clear which part of the sentence was being referred to), the most logical assumption for this item on this factor is that the disagreement is about people not deliberately avoiding other race groups (in other words, it is probable that people in this factor are saying that people *do* deliberately avoid other race groups, while people in Factor 1 might either be disagreeing with this part of the sentence or disagreeing that it often turns out that people avoid each other).

What is very interesting in this factor is that the item, “It is often the accents of people from other races that prevents different race groups from mixing” had the least significance for people in this factor (-1.154) than for all other factors as this item was exemplary in all other factors but not in this one. It is thus a distinguishing item because it was least disagreed with, as opposed to it being most disagreed with for people in Factor 1 where it was a distinguishing item for that reason. Although this item was disagreed with and must be understood as characterising the factor in terms of disagreement, it was not disagreed with as emphatically as it was in other factors (all other factors had z-scores less than -1.5). This possibly supports the idea that people on this factor have more ethnocentric perceptions than people on other factors for the following reason: accents are directly associated with race groups in the item, and not wanting to make contact with people of other race groups because of their accents may indicate a preference for the accent of one’s own race group.

5.3.3. Factor 3: The Segregationists.

This factor is politically charged. Most items involved political and/or social influences, as shown in Table 7.

Table 7

Items qualifying for analysis in Factor 3

Statement	**Z-SCORE**	**Distinguishing**
Politicians playing the race card creates divisions between races	2.318	Yes
The use of offensive names to identify other race groups inhibits interracial mixing	1.728	Yes
In new situations, people will automatically find others of the same race to talk to or sit with	1.547	Yes
It is largely the responsibility of politicians and leaders to promote racial tolerance	1.440	Yes
Personality plays a big role in whether people will mix across races	1.061	Yes
People would like to connect with other race groups but they just don't know how	-1.630	Yes
Nowadays people of different races want to work together to build a better country	-1.780	Yes
It is often the accents of people from other races that prevents different race groups from mixing	-1.867	No
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-2.139	Yes

The three items which are exemplars in terms of agreement are also distinguishing items: “Politicians playing the race card creates divisions between races” (2.318), “The use of offensive names to identify other race groups inhibits interracial mixing” (1.728), and “In new situations, people will automatically find others of the same race to talk to or sit with” (1.547). The next most pronounced item both characterising and distinguishing this factor was, “Continual requests to specify race (e.g. on application forms) maintains divisions between races” (1.458), followed by “It is largely the responsibility of politicians and leaders to promote racial tolerance” (1.440). This places much of the responsibility for interracial harmony and blame for racial segregation on political leaders. The “offensive names” item suggests that if people were more politically correct in the terms they use then there may be more interracial mixing. The only item which does not seem to fit with the theme of these items is the “same race” item about finding people of the same race to sit with or talk to in new situations.

However, the “same race” item might best be understood in conjunction with two of the defining items with which people on this factor disagreed. These items were, “People would like to connect with other race groups but they just don't know how” (-1.630) and “Nowadays people of different races want to work together to build a better country” (-1.780). These items present a negativistic view of racial integration; and all items discussed to this point led to this factor being labelled “The Segregationists” due to the manifest idea that segregation is persistent and relevant for people on this factor. Two other items best discussed together which were both characterising and distinguishing items were “Personality plays a big role in whether people will mix across races” (1.061 – i.e. agreed with, also happens to be both a characterising and distinguishing item for Factor 1 but with a different average ranking as shown in Table 8 in the next section) and “The gender of people makes a huge difference to whether they feel comfortable communicating across race groups” (-2.139, strongly disagreed with). It is interesting that people on this factor would agree that personality has an influence on interracial mixing but gender does not. With the gender item, people in this factor may either be suggesting that both genders don’t want to mix, or that gender is external to race issues. Logic suggests that what is being affirmed here is that people in general do not want to mix across races, regardless of gender, but personality is flexible and may account for why some people mix across race groups while the majority do not.

The item, “It is often the accents of people from other races that prevents different race groups from mixing” (-1.867) was an exemplary item with which people on this factor tended to disagree in terms of its perceived importance to interracial contact. The way that this might be understood in this factor is that accents have very little to do with politics and social activity. Other than this, the reason for disagreement with this item may lie in the item’s overall perceived importance for participants as discussed in Section 5.2 above, since this item does not really seem to fit with the sentiments expressed in other exemplary items.

5.3.4. Factor 4: The Integrationists.

This was the most positive factor, with all items but two being either facilitating items or neutral items on the “agree” side and only inhibiting items on the “disagree” side, as illustrated in Table 8.

Table 8

Items qualifying for analysis in Factor 4

Statement	**Z-SCORE**	**Distinguishing**
Blaming other race groups for the problems in South Africa inhibits interracial mixing	1.978	No
Politicians playing the race card creates divisions between races	1.754	No
The current youth of South Africa are much more likely to mix across races than older people	1.684	Yes
There are as many problems within race groups as there are across race groups	1.606	Yes
People easily mix with people of other races when they have similar interests in sport, music, etc.	1.444	Yes
When people have had the same level of education, race doesn't stop them from mixing with each other	1.123	Yes
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups	1.035	Yes
Differences in ways of behaving and communicating make it difficult for different race groups to interact	-1.021	Yes
The lack of trust between people of different race groups inhibits interracial contact	-1.079	Yes
People are anxious about interacting with people of other race groups	-1.129	Yes
It is often the accents of people from other races that prevents different race groups from mixing	-1.708	No
In new situations, people will automatically find others of the same race to talk to or sit with	-1.914	Yes
People want to retain their racial identities so they don't want to mix with other race groups	-1.957	Yes

The two most agreed with items were not distinguishing items. They were, “Blaming other race groups for the problems in South Africa inhibits interracial mixing” (1.978) and “Politicians playing the race card creates divisions between races” (1.754). These two items are strikingly related as the typical use of the “race card” invokes blame, and both blaming certain races and

“playing the race card” involve the isolation of certain race groups. It is likely that people in this factor believe that talking about race in such a way that certain race groups are seen in a negative light is a strong enforcement of ongoing segregation. This is reminiscent of the beliefs of people in Factor 2, but when the two items are interpreted with the factor as a whole, a different pattern of meaning becomes apparent for the items.

It appears that this factor of people see race not as an issue in and of itself, but as an issue of these such politics; as well as of the past – “The current youth of South Africa are much more likely to mix across races than older people” (1.684), of personal preferences – “People easily mix with people of other races when they have similar interests in sport, music, etc.” (1.444), of level of education – “When people have had the same level of education, race doesn't stop them from mixing with each other” (1.123), and of general human tensions – “There are as many problems within race groups as there are across race groups” (1.606) and “People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups” (1.035). The “interests” and “education” items are interesting when considering two items with which people on this factor disagreed, which were that “Differences in ways of behaving and communicating make it difficult for different race groups to interact” (-1.021) and, “It is often the accents of people from other races that prevents different race groups from mixing” (-1.708). Accents might be considered part of people’s behavioural and communicative repertoire, thus making the “accents” item easier to interpret in this factor than in other factors. It is possible that what it being proposed is that while similarities make it easier for people to mix across race groups, differences per se are not a reason why people cannot mix across race groups.

These items discussed above, particularly those which both characterise and distinguish (all but the first two), give a positive view of interracial interaction, suggesting that in an “all things being equal” situation it is not race itself which is a barrier to contact. Accordingly, people on this factor have been labelled, “The Integrationists”. Affirmation for this comes from the items with which people on this factor disagreed. The items most strongly disagreed with were, “People want to retain their racial identities so they don't want to mix with other race groups” (-1.957) and “In new situations, people will automatically find others of the same race to talk to or sit with” (-1.914). It is particularly noteworthy that the latter item had a Q-sort value of -6, indicating the highest level of disagreement, and that this had a large value difference with Factor 3 on which this item had a Q-sort value of 5. Factor 3 was a more negative factor which unfortunately more

closely approximates actual race issues in the country according to the reviewed literature. People on this factor (Factor 4) further disagree that “The lack of trust between people of different race groups inhibits interracial contact” (-1.079) and that “People are anxious about interacting with people of other race groups” (-1.129). Trust and anxiety are major themes in contact inhibition which people on this factor appear to perceive as having little significance in interracial contact.

5.4. Summary

Four factors were generated which explained 36% of the variance. All factors had reliability scores above 0.95. A total of 42 out of 55 participants loaded onto one of these four factors. Correlations between factors could be explained by consensus items across all factors as well as the perceptions of people in one factor having some relationship to the perceptions of people in another factor. Factors were labelled “The Experientialists” (Factor 1), “The Ethnocentrists” (Factor 2), “The Segregationists” (Factor 3), and “The Integrationists” (Factor 4). Factors 1 and 4 had more positive views of interracial contact compared to Factors 2 and 3.

Chapter 6: Discussion

6.1. Summary of aims and results

This study sought to uncover clusters of people who had similar perceptions about interracial contact in South Africa. The two secondary intentions were to add to the current knowledge about South African interracial relations and to advocate Q-methodology as a technique for investigating race issues in South Africa. Overall, it is believed that these tasks were accomplished. The Literature Review affirms the place for Q-methodology in race research in South Africa and the use of Q-methodology in this study lead to the discovery of four broad factors of alike-thinking participants during data analysis, explaining 36% of the variance in the way people perceive interracial contact in South Africa. The factors were extracted using a centroid analysis (with Horst's criterion) and rotated using varimax. The four factors produced in the analysis showed both convergent and discrepant beliefs about interracial mixing in South Africa, and were labelled "The Experientialists" (Factor 1), "The Ethnocentrists" (Factor 2), "The Segregationists" (Factor 3), and "The Integrationists" (Factor 4). These labels were based on the items which exemplified factors or both characterised and differentiated them from each other.

6.2. Summary of factors

Although generally quite distinct, factors shared some similarities between each other. For example, Factors 1 and 4 were more positive in nature and facilitating items were mostly agreed with while inhibiting items were mostly disagreed with. Factors 2 and 3, however, were more negative in outlook and inhibiting items were mostly agreed with while facilitating items were mostly disagreed with. For these reasons, Factors 1 and 4 and Factors 2 and 3 are summarised together in the following paragraphs.

People loading on Factor 1 generally felt that experience and socialisation were key indicators for interracial contact. The responsibility of politicians for positive intergroup contact was denied and may possibly stem from the fact that the individual and "tolerant families" were relevant in this factor as opposed to wider spheres of influence such as national politics. Participants tended to reject what others think as a hindrance to mixing, which may be indicative of the fact that cognitive aspects of avoidance are not a primary influence in interracial mixing for people on this factor. Factor 4 was the most positive factor. People on this factor gave an overall feeling

that that there are not as many barriers to interracial contact as other factors indicate. They expressed the view that the current youth of South Africa wants to work together to build a better country and felt that if people have things in common they will be able to g*et al*ong despite belonging to different race groups. This is supported by the findings of Gordon *et al*. (2012, p. 6) in the SASAS review, which show that "young people are more confident about progress in race relations in South Africa, an important indication of the country's movement towards the goal of racial harmony".

For Factors 2 and 3 it was useful to rely more heavily on the exemplary items (z-scores above or below 1.5 or -1.5, respectively) to make sense of the perceptions held by participants. People on Factor 2 generally placed the responsibility for interracial mixing outside of individuals and looked towards society in general as a determining factor in interracial mixing. It was also established that for people on this factor, cultural differences rather than schooling or education differences are more critical for inhibiting contact. For those in Factor 3, politics and social barriers to mixing is a massive theme. The general sense that could be derived from this factor is that segregation is common and politics have a large role to play in this. Use of the "race card" by politicians was strongly supported as a barrier to interracial contact and participants disagreed that people would like to connect with other race groups or work together to build a better country, which possibly lend the greatest support the label.

6.3. Discussion of findings in relation to the literature

Some of the work discussed in the in the literature on intergroup contact are relevant in this study. The items implicating anxiety, trust, rejection, stereotypes, and metastereotypestouch on long-established issues which inhibit intergroup contact (except metastereotypes, which is relatively new in the literature). The item, "People are anxious about interacting with people of other race groups" had neutral Q-sort values for Factors 1, 2, and 3 (0, 0, and -1 respectively) and a Q-sort value of -4 for Factor 4. This shows that for people in this sample, anxiety was *not* perceived as an important inhibiting factor for interracial contact. This is very interesting given its prominence in the literature on intergroup contact. Also prominent in the literature is the notion of outgroup trust. In this study, the item, "The lack of trust between people of different race groups inhibits interracial contact" was also close to neutral in its perceived importance, with Q-sort values of -1, 1, 2, and -3 (for Factors 1 to 4, respectively). Additionally, the item about threat was not very salient although it was more salient than the two items on anxiety and trust. The

item was, “When approaching another race group there is always the threat of being rejected or embarrassed” and had Q-sort values of -3, 2, -1, and -3. What is most fascinating about all of these three items is that they all have a slightly negative average Q-sort value, which indicates that people did not perceive them to be important. This could not have been anticipated given the findings in the literature.

In terms of the item with stereotypes, this was at least supported to some degree as important, especially by people in Factor 1. The item was, “Stereotypes about other races inhibit interracial mixing”. This item manifested as an exemplary item with a Q-sort value of 5 in Factor 1. In the other factors, it was not as relevant in relation to other items, with Q-sort values of 2, 2, and -1 for Factors 2, 3, and 4, respectively. The average of the values indicates some agreement, which at least supports the perceived relevance of stereotypes for people in all factors when it comes to interracial contact. This bolsters the importance of stereotypes in making sense of interracial contact in South African samples. The only metastereotype item in this study, however, was quite heavily disagreed with. The item was, “Fears about being called racist prevents different race groups from mixing” and had Q-sort values of -5 for Factor 1, 0 for Factor 2, -4 for Factors 3 and 4. Unlike the “stereotypes” item, this item is an *example* of metastereotypes so it does not preclude the possibility that metastereotypes are important for the sample but it does show how this specific metastereotype was not perceived as a significant inhibiting factor in relation to other items.

Other general intergroup contact findings have been about the effects of deprovincialisation and extended contact. Something unexpected and unanticipated was the fact that neither “Contact with other race groups makes people re-evaluate their beliefs about those race groups” or “Seeing friends interact across race groups makes people willing to do the same” was a salient item. The first item should have been salient as contact is supposed to lead to deprovincialisation which allegedly involves “recognizing the value of other cultures and thereby putting the taken-for-granted own cultural standards into perspective” (Verkuyten *et al*., 2010, p. 398). The second should have been salient as extended contact should in theory increase the chances of contact (Wright *et al*., 1997), therefore it might be expected that people perceive it to be the case. Q-sort values for both these items were largely neutral (averaging a score of 1 for the first item and a score of -0.75 for the second). People clearly did not perceive these items as having a significant impact on interracial contact.

What is possibly most interesting from these findings in relation to interracial contact in the South African milieu in particular was the value given to the "context" item. Despite Durrheim and his various colleagues' (e.g. Durrheim & Dixon, 2005; Durrheim *et al*. 2011) insistence that the context of interracial contact is of close to absolute importance in the way interracial contact unfolds and is managed, context did not emerge as important for people in this sample relative to other items. For the item, "The context is very important in determining whether people will mix across race groups", the Q-sort value was 2 for Factors 1 and 2; and -2 for Factors 3 and 4, indicating that the item was of no perceived significance in determining the likelihood of interracial contact.

The range of responses and the differences between the factors of people in the results of this study supports the notion that the complexity of race in South Africa is not highlighted in traditional theories of contact. Pettigrew (2010, p. 418) outlines just how complex the study of interracial contact can be in South Africa:

> Rarely has social psychology studied an intergroup setting as complex as reported in these articles. Four "races," multiple social classes, multiple religions, 11 official languages, and a sharp urban–rural divide are deeply entwined. All this is burdened with the legacy of centuries of racial discrimination that remains everywhere apparent in the form of vast White wealth aside deep Black poverty. Moreover, this mixed scene occurs in the midst of a massive reordering of power, laws, and social practices that is still taking shape. Even power is divided—political power dominated by Black Africans, economic power by Whites. When I visited the country back in 1956 and then again in 2006, I could not help but wonder why there is not more crime and conflict than there is.

Given the complexity of South Africa as a setting for intergroup research, Dixon *et al*. (2005, p. 709) have rejected the usual experimental methods for examining the relationship between contact and prejudice in South Africa and "advocate research that proceeds from where we are now, in the messy, ambivalent, and often still deeply divided arenas of everyday life". They suggest that this should be done by focusing on what ordinary individuals have to say as well as what they do in contact situations and how they manage this contact. This is fair enough, especially given their backing evidence, however there is no reason why research should not have a quantitative dimension that does not derive from "the messy, ambivalent, and often still deeply divided arenas of everyday life". The use of Q-methodology in this project has shown how it is possible to use quantitative methods while still being sensitive to individual

experiences. The kind of qualitative research advocated by Dixon *et al*. (2005) is, however, meaningful in its contribution to what is clearly essential for contact to be understood in South Africa, and that is an approach to looking at peoples' subjectivity. I argue that Q-methodology allows for the individual ways that people perceive contact to come through, thus showing from ordinary citizens' side what is important for them rather than the researcher starting with some sort of hypothesis.

6.4. New insights

New insights come from the consensus items in the study, particularly the ones that are agreed with and disagreed with across factors (as opposed to being perceived as neutral). What was important for people in all factors in terms of disagreement was that "It is often the accents of people from other races that prevents different race groups from mixing"; "Race issues always come up when people mix across race groups"; "People don't mix across races because they fear that members of their own race will disapprove of them"; and "People want to retain their racial identities so they don't want to mix with other race groups". The accents item should probably not even feature in South African interracial contact research given the highly significant disagreement with this item on all factors. The disagreement of the "race issues" item is positive in that interracial contact can clearly happen without race being a problem. The other two items are interesting because they relate to how people orient to their own groups. The extraordinary volume of research on in-group identification and membership salience does not align with this finding. These items are positive in that they highlight the possibility that people are not so desperate to cling to values surrounding membership in their own groups.

Perhaps far more interesting and exciting are the items which emerged as consensus items for agreement since they are not as familiar in the literature. These items are, "The current youth of South Africa are much more likely to mix across races than older people"; "The use of offensive names to identify other race groups inhibits interracial mixing"; "Blaming other race groups for the problems in South Africa inhibits interracial mixing"; "Politicians playing the race card creates divisions between races"; "Being raised in tolerant families makes people more willing to mix with people of other races"; and "Personality plays a big role in whether people will mix across races". The general agreement of these items is productive for three reasons. First, they indicate where interventions may be possible, for example by finding ways to reduce blame, encouraging youth to be leaders in tolerance, and educating authorities about the detrimental

impact of using race as a point of leverage. Second, they underline the tremendous value of this type of research – no method other than Q would have been able to produce such findings, especially because of the way value can be assigned to the items by ranking them according to personal significance. Most importantly, they indicate that what has been thought to matter so much for contact research in South Africa might possibly peripheral to what actually matters for people. This is also supported by the discussion in the previous section.

Another new insight comes from the way people did not perceive contact as being an important indicator for more contact to occur. Since contact theory generally holds that intergroup contact will reduce prejudice, thus leading to more contact, this is a somewhat controversial assertion. Three items which directly implicated interracial contact are, “The more people are exposed to other races, the more likely they are to mix socially with them”; “Growing up in a mixed-race environment is a good indicator of willingness to interact with people of other race groups”; and “Being at school with people of other races makes people more willing to interact with other race groups”. The first of these items was exemplary in Factor 1 with a Q-sort value of 5. However, the other three factors had Q-sort values of 1, 1, and -1, which are considered as neutral. Similarly, people on Factor 1 felt that the “mixed-race environment” item was important but Q-sort values for the other three factors were 0, -1, and -1. It would appear that most people in the sample believe that previous contact does *not* predict future contact. Most interestingly is that people on all factors *disagreed* with – or were neutral about – the item about being at schools with people of other race groups. The item was exemplary in Factor 2 with a Q-sort value of -5 and the other factors had Q-sort values of 2, -2, and 0 for this item.

It is not clear why most people would not perceive previous contact to be a facilitator of future contact, however it may relate to previous findings about the paradoxical effects of contact in South Africa (see Finchilescu & Tredoux, 2010). It could also mean that what happens *in* the contact situation is important, something many intergroup contact researchers acknowledge. For this sample, different factors of people had different perceptions about interracial contact, and for the sample as a whole it seems that what matters most is not contact but rather the influences alluded to in the six items with which all factors agreed as discussed above. This is speculative, but whatever the case may be it is obvious that intergroup contact theory is not an entirely useful approach to understanding the way people perceive interracial contact in South Africa. The results from in this project not only rebut much of what has constituted the intergroup contact literature, but also show a large amount of variability in contact perceptions. The use of

Q-methodology as an approach is validated and shows the importance of exploring the concepts of interracial contact research in South Africa rather than imposing them through experimental or purely quantitative approaches.

6.5. The value of Q-methodology

The factors in this study undeniably show that there are varied, heterogenous perceptions about interracial contact and as such, it cannot be assumed that people will respond to contact in the same or similar ways. The four factors revealed in the study lend support to the difficulties of applying experimental methods and causal models of contact in South Africa, where people's histories and experiences with contact will be extremely diverse. Cherry (1995) holds that individuals in general have a "stubborn particularity" in their perspectives, but, since many of the experimental studies on interracial contact have used formal questionnaires, "participants' own concepts of contact are quietly subsumed by concepts grounded in the academic literature on the contact hypothesis" (Dixon *et al*., 2005, p. 701). The use of Q-methodology in this study has thus been invaluable in its ability to capture four factors which reveal very different understanding of barriers to interracial contact, thus allowing for complex arrays of attitudes to be measured and interpreted. The fact that a broad range of items could be used instead of needing to reduce outcomes to the effects of mediators and moderators (which may generally apply, but not always) is highly beneficial because it allows for individual attitudes to come to the fore.

Attitudes are particularly notorious in contact research as they are "dynamic and therefore subject to change" (Holtman *et al*., 2005, p. 475). They can change across time, contexts, and communities (Dixon *et al*., 2005). The fact that attitudes can be so disparate is nothing to lament, however, as "[t]he bedrock assumption motivating modern liberal democracy is that we should expect, and therefore accommodate as best we can, reasonable disagreement between citizens on vital matters" (Neblo, 2009, p. 31). This is where Q-methodology shines. In its freedom of subjectivity, Q-methodology is not only sensitive to individual opinions but also allows for participants to give their views in a way that reflects the perceptions they have derived from their particular cultural and historical schemata as well as general experiences as individuals. Since it is crucial to consider the individual in light of the collective and vice versa when making sense of perceptions of intergroup contact, the use of Q-methodology in this study was an indubitably valid approach to uncovering perceptions about interracial contact.

The use of Q-methodology in this study has also been valuable in that the strengths of both quantitative and qualitative approaches could be drawn upon. Experimental methods in contact research have been shown to be lacking for understanding the nature of interracial contact in its everyday expression. Q-methodology can intelligently avoid constrained and imposed conceptions and effects of interracial contact while skilfully retaining the advantage of experimental research outlined by Dixon *et al*. (2005, p. 701), which was "that it allows researchers to classify and compare the experiences of large numbers of respondents and provides useful information about the broad features of social relations in a given society". Q-methodology is suited to this, and has the added benefit of its qualitative dimension. The qualitative dimension of interracial contact research is imperative to the integrity of data on interracial relationships in its ability to capture the voice of the individual. Qualitative methods still have issues, however, a major one of which is the subjectivity of the researcher.

So, while experimental methods are helpful in generating reliable information about when contact is and is not effective and under what conditions contact is more likely to take place, this stance does not allow for exploring subjective viewpoints about why contact is not taking place as a more discursive approach would allow. And while a qualitative study allows for depth, variability, and an often "natural" unfolding of data, it still falls prey to the researcher's intentions. A Q-methodological study, in being "qualiquantological" (Stenner & Stainton Rogers, 2004), can merge these two approaches by allowing the individual viewpoint to come through while still being analysed in largely objective quantitative ways. Q-methodology also incorporates mediating and moderating factors by its very nature (in the statements in the Q-set) and reduces the complexity of contact research by investigating participants as whole units as opposed to just aspects of their psyche as scales would measure (Watts & Stenner, 2012).

6.6. Reflexivity

It is typically standard practice to include a section on reflexivity in a qualitative study. Although Q-methodology is not strictly qualitative, there are aspects of the study where there is a largely qualitative dimension and my influence could have made a large difference to outcomes. First, there is the question of the Q-set's ability to capture the concourse as a whole. To counter bias on my part, I used the expert advice of two researchers on the topic of race as well as that of my supervisor, an expert in social psychology and Q-methodology. Second, there is a general

concern for all Q-methodology researchers in terms of bias at the stage of interpretation (Cross, 2005) and it has been noted that the way that factors are read could be as a result of the researcher's perspectives (Stainton Rogers, cited in Cross, 2005). My perspectives, experiences, motives and so forth as well as my race may have been influential in my interpretation of the factors. I come from a White, Westernised world and have very little experience in how other race groups generally conceptualise race and matters relating to it. I have access to a particular kind of media and particular paradigms of understanding from my spheres of influence, which almost entirely involve white people or friends of other race groups who have been Westernised and tend to have similar viewpoints to my own. My own attachment to the topic comes from a deep desire for free and harmonious interaction amongst race groups, which may have caused me to see the factors in a specific way. These concepts were all kept in mind prior to, during, and after interpretation and objectivity was strived for, however this may not have been sufficient to keep bias out of the interpretation so in the interest of disclosure the tables of characterising and distinguishing items are attached to this document (see Appendix H).

I have tried not to claim that my observations are objective or correct, and to be as open about the data as possible. However, I believe that the interpretations made about the factors are reflective of the factors themselves and while I am in firm agreement that the researcher cannot understand the participants' relationships with words I also stand by Neblo's (2009, p. 32) assertion that "we should be very cautious about impugning someone's motives" in his article using principles of Q-methodology. The risk in one direction is being too speculative and the risk in the other is not being fair to the data. I attempted to balance these two concerns in my interpretations.

6.7. Limitations

Even though "impugning someone's motives" (Neblo's case in the preceding subsection) should be a precaution in interpretation, a limitation of this study and Q-methodology in general is the layer of self-report. There are two major problems with this. The first has already been touched on in the previous subsection, but is summarised in the case of Q-methodology by Cross (2005, p. 211), who points to "the risk that the respondent will use the instrument to give an account that they think is acceptable to the researcher rather than how they truly feel about an issue". Potentially problematic is the fact that it was stated in the participation information sheet that "I

have chosen to explore people's views about contact between different race groups. The idea is to get a deeper awareness of the reasons which prevent people from mixing across races with the hope of adding to a growing body of literature on this topic in South Africa". This may have lead to the production of what participants thought would be desired responses on my part.

The sample in this study is problematic in some ways. First, there was not an accurate representation of race group. Specifically, there were more white people than what is generally represented in the South African population, and there were too few Indian and Coloured participants. Durrheim, Tredoux, Foster, and Dixon (2011, p. 276) had a similar problem, stating that "data for Indian and coloured respondents are too sparse" in their study. The sample in this study, while a non-representative convenience sample, is still valid for a Q-study because such studies do not attempt to generalise to the rest of the population. What may be of concern, however, was that people were participating for course credit. This could be an ethical problem in some cases as people may have needed the credit, and in some cases it may have attracted participants who were bright and diligent and looking to excel in their courses. These two cases were frequently observed and may have led to a distorted pattern of viewpoints compared to what may have been obtained from a random sample.

Although the sample was university students, thus indicating some level of English proficiency, some second-language English speakers took longer to do the Q-sort and struggled to express themselves coherently in the interviews. These participants (albeit only three or four of them) were from rural areas. Thus, they may have struggled silently with some of the items and been too ashamed to ask for assistance. One of these participants did, however, ask what was meant by "playing the race card" and I realised that the use of metaphorical use of language is not fair for second-language English speakers. Compounding the issue of understanding was the identification of ambiguity in two items. One of these items is the "deliberately avoid" item, as it is not clear which part of the sentence is being agreed or disagreed with (participants may be disagreeing that people deliberately avoid other race groups or they may be disagreeing that it often turns out that people deliberately avoid other race groups), or whether the entire sentence is being disagreed with. The same issue is true for the "gender" item – participants may be agreeing or disagreeing that gender is relevant for interracial contact or asserting that people of both genders (in other words, all people) do or do not want to mix across race groups. Thirdly, but probably not lastly where validity of items is concerned (some issues may not have been identified yet), the "accents" item was a bone of contention for many participants, with some

expressing confusion or downright irritation that the item existed, with one of the participants describing this item as, “So lame” (Participant 24).

A final limitation or at least point of serious discomfort became more and more obvious during the interviews when participants often expressed that these issues were not something that they generally thought about (common in interviews from participants loading on Factors 1, 3, and 4). This indicates that there is an implicit message in the Q-set – that there are racial divisions which the P-set has experienced. Some of those loading on Factor 4 gave interviews expressing disbelief that these items reflected the actual case for race relations in South Africa, which supports the point: the Q-set implies that there are divisions along racial lines to do with contact when this might not be within the realm of experiences for participants.

6.8. Conclusions

This study set out to discover clusters of people who think similarly about interracial contact in South Africa. Some clearly different factors of people emerged in the analysis and that there is undeniable variation in the way people perceive interracial interaction. This is among the study’s strengths – a scale is unlikely to capture variation in the way people think about interracial contact. Even if it could, the *value* of each item in *relation* to other items can only be measured by Q-methodology. As Neblo (2009, p. 33) notes, “the standard analysis of variables is producing diminishing returns because we are constrained to look at each item in relative isolation”. Altogether, this study is valuable in its unique approach to understanding barriers to contact and adds a different dimension to the findings surrounding interracial contact in South Africa.

6.9. Recommendations

This study may have been improved with the addition of a questionnaire to be completed beforehand. Dixon *et al*. (2010) used a Contact questionnaire which measured participants’ interracial contact using 5-point scales. Six of the items measured the perceived quality of contact on dimensions such as “cooperative” and “intimate” which one item measured the amount of contact participants experienced (“no contact” to “frequent contact”).These items could be used to create a scale which broadly assesses interracial contact; with the addition of questions such as how many friends of different races the participants had and to what extent

they believed that interracial contact is important. This would have been able to supplement the results and support factor interpretation.

A minor change that would be included in the study is the addition of three items. Three participants made suggestions which seemed legitimate and could have been useful in this study. The suggestions were about “scenarios”, “myths” and “stories”. The participant who believed there should have been more scenarios in the Q-set used the specific example of willingness to interact with other groups when help is required. This is a fair point; however the “scenarios” could be infinite so items would have to be cleverly devised. The two participants who spoke about the inclusion of myths and stories made similar points. The participant who suggested an item about stories said that parents and other influential figures tell us stories about other race groups which affects our interaction with them and alluded to the influence of apartheid on the various race groups. This is a very valid observation – as those on Factor 1 observed, tolerant families are key to interracial relations – and could have a great effect on the way that people from various race groups interact. The participant who spoke about myths believed that we hear things about other race groups from people in our spheres of influence that are not true but nonetheless can inhibit interracial interaction.

If further research is to be done on the current study, it is recommended that the six items with which all factors indicated agreement should be pursued as research topic. The six items with which most participants agreed might just be specific to this sample, however they may also be highly plausible indicators of why there is ongoing segregation in the country. If it is the case that these six items are strong influences on interracial mixing then, aside from the “personality” item, there is hope for changing the sources of ongoing segregation in our country by addressing each issue.

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Appendices

Appendix A: Ethical Clearance

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: MPSYC/13/005 IH**
PROJECT TITLE:	Perceptions of interracial contact in a South African sample: a Q methodological approach
INVESTIGATORS	Mills Kyla
DEPARTMENT	Psychology
DATE CONSIDERED	24/05/13
DECISION OF COMMITTEE*	Approved

This ethical clearance is valid for 2 years and may be renewed upon application

DATE: 20 June 2013

CHAIRPERSON
(Professor A Thatcher)

cc Supervisor: Prof. G Finchilescu

DECLARATION OF INVESTIGATOR (S)

To be completed in duplicate and **one copy** returned to the Secretary, Room 100015, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure, as approved, I/we undertake to submit a revised protocol to the Committee.

This ethical clearance will expire on 31 December 2015

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix B: Participant Information Sheet

Dear student

My name is Kyla Mills. I am currently completing my Masters Degree in Psychology at the University of the Witwatersrand. As part of our course, we are required to do a research paper on a topic of our choice. I have chosen to explore people's views about contact between different race groups. The idea is to get a deeper awareness of the reasons which prevent people from mixing across races with the hope of adding to a growing body of literature on this topic in South Africa. I need volunteers to assist me in collecting the data. This will require no more than an hour of your time and can be arranged around your schedule. Please note that you will not benefit from participating and participation is completely voluntary.

When you arrive to give your input you will be required to complete a short demographics form and sign a form in which you acknowledge that you understand what the research is about and that you have given your consent to participate. If you feel uncomfortable at any time you will be allowed to withdraw from the study. Please note that you will be filmed during the process of the research so that accurate records of the process can be kept. The recordings will only be able to be accessed by me and my supervisor. Your name will not be used anywhere in the research so that your input is kept confidential. You will be given access to the results of the study via email if you wish to see them. It is not anticipated that you will experience any threat to your wellbeing during the data collection; however a list of organizations that will be able to help you free of charge are given below in case you experience any emotional distress:

Wits Emthonjeni Centre
0117174513
By appointment during the week

LifeLine
0117281347
24 hours a day, telephonic

SADAG (South African Depression and Anxiety Group)
0112626396
Monday to Sunday 8 am to 8 pm, telephonic

Your help will be greatly appreciated. Please keep this form as you may need it in the future.

Kind regards

Kyla Mills
Email : kylajmills@gmail.com

Supervisor: Dr Gillian Finchilescu
Gillian.Finchilescu@wits.ac.za

Appendix C: Focus group consent

Participant consent

If any questions you have about this research have been answered to your satisfaction, and you would like to participate in the research, please print your name and sign below.

Please note that by signing this form you acknowledge that you have read and agree with the Participant Information Sheet, including that sessions will be recorded.

_____

Name of Participant

_____

Signature of participant

_____

Date

Appendix D: Concourse

#	**Item**	**Source**
1	It is important to work for reconciliation and brotherhood between all races in this country	Duckitt scales
2	If all races mixed freely they would certainly live in peace	Duckitt scales
3	Only greater equality between all races can in the long run guarantee social peace in this country	Duckitt scales
4	Some race groups are less inclined than others to make contact with other race groups (a)	Duckitt scales
5	It is important for everyone to forgive and forget the injustice of the past in order to create a society in which all people will live together in full equality	Duckitt scales
6	It is almost certainly best for all concerned that interracial marriages remain very rare	Duckitt scales
7	If all race groups were equally wealthy, there would be more interracial interaction (a)	Duckitt scales
8	Interracial contact is not taking place because all race groups are prejudiced against other race groups	Pettigrew & Tropp, 2000
9	The level of prejudice someone has is the most important indicator of whether he or she will make contact with people of another race group	Vorauer, 2003
10	People's prejudiced feelings have more to do with a lack of racial contact than prejudiced thoughts	Tropp & Pettigrew, 2005b
11	People usually have a strong common group identity with their race group and this makes them less likely to mix with other race groups	Gaertner *et al*., 1994 etc.
12	If people have a negative encounter with someone of another race group they will be much more likely to avoid that race group	Tropp, 2003
13	Learning about other race groups reduces prejudice and makes interracial contact more likely	Pettigrew, 1998
14	Changing the behaviour of race groups will make interracial contact more likely due to less prejudice	Pettigrew, 1998
15	When people of different races have emotional ties to each other, prejudice is decreased and interracial contact is more likely	Pettigrew, 1998
16	If people changed how they thought about their own race group to be less prejudiced then interracial contact will be more common	Pettigrew, 1998
17	It is usually the minority group that is prejudiced against	Tropp & Pettigrew, 2005a
18	When people are on their own they are more likely to make contact with people of other races than if they are in a group of their own race	Frey & Tropp, 2006
19	If people have friends from other race groups, then their other friends are generally less prejudiced against those race groups	Tausch *et al*., 2011
20	Whether contact is made with other race groups depends on how important it is to a person to make contact with other race groups	Van Dick *et al*., 2004
21	When there is positive contact between race groups people are less prejudiced and more likely to seek further contact with other race groups	Verkuyten *et al*., 2010
22	If people felt like they had a common identity as South Africans there would be more mixing across races	Verkuyten *et al*., 2010
23	Stereotypes about other races prevent interracial mixing from happening	Frey & Tropp, 2006 etc.
24	People don't like to approach other race groups because of the stereotypes other race groups have about their race group	Sigelman & Tusch, 1997 etc.

25	There is a lot of anxiety about what will happen when people of one race group approach people of another race group	Stephan & Stephan, 1985 etc.
26	The different races in South Africa generally don't trust each other which makes interracial contact less likely	Insko & Schopler, 1997 etc.
27	People are more likely to approach a person of another race group when that person is alone	Paolini, Harwood & Rubin, 2010
28	When members of the same race have greater ties to their race they won't make contact with other races	Paolini, Harwood & Rubin, 2010
29	People don't make contact with other race groups because they were brought up with people of their own race group only	Student questionnaires
30	Socioeconomic status is often a reason why different races don't interact	Student questionnaires
31	People often find that they feel uncomfortable around other race groups	Student questionnaires
32	Being at school with students of other races makes people less prejudiced and more likely to interact with other race groups	Student questionnaires
33	When people of other races come from the same income group then mixing across races is not an issue	Student questionnaires
34	Some people are raised by their families to dislike or distrust other race groups so they don't mix with people of other races	Student questionnaires
35	People's mindsets are gradually changing in South Africa and that makes more interracial contact possible	Student questionnaires
36	There is a lot of misunderstanding that happens between race groups which makes people prefer to stick to their own race group	Student questionnaires
37	As people become more educated about other races and South Africa's history they are more likely to mix with other races	Student questionnaires
38	People long to be more connected to other race groups but they just don't know how	Student questionnaires
39	Cultural differences are one of the main reasons why people don't mix across races	Student questionnaires
40	Most people are just racist and don't want to mix with other races	Student questionnaires
41	Apartheid is a major reason why the races don't mix	Student questionnaires
42	Interest in other cultures has made South Africans more likely to mix across race groups	Student questionnaires
43	It depends on a person's personality as to whether they will mix across race groups	Student questionnaires
44	It is people who are racist and not race groups in general who are racist and that is what stops interracial mixing	Student questionnaires
45	The influence of what parents teach their children causes them to be racist and not mix across race groups	Student questionnaires
46	Most people just want the past to be left in the past and interact freely with people of other race groups without any worries	Student questionnaires
47	The current youth of South Africa is much more likely to mix across races than older people	Student questionnaires
48	Not making contact with other race groups has more to do with fear of the unknown than the race group itself	Student questionnaires
49	Nowadays people want to improve relations between other races groups and as a result there is more interracial mixing	Student questionnaires
50	The desire to make new friends and meet new people is often stronger than the barriers to interracial contact	Student questionnaires
51	Some race groups feel that they are better than other race groups and don't mix with other race groups as a result	Student questionnaires
52	There is a lot of anger between race groups about getting jobs and this reduces interracial contact	Student questionnaires

53	People enjoy having different experiences with other cultures and that makes them more likely to mix across races	Student questionnaires
54	Nowadays people want to work together to build a better country so interracial mixing is becoming more common	Student questionnaires
55	White people are still held accountable for apartheid and this stops other races from mixing with them	Student questionnaires
56	Cultural differences create great divisions between races which makes interracial contact less likely	Student questionnaires
57	Most people are closed-minded and want to cling to the idea that their race is superior	Student questionnaires
58	The stereotypes and stigmas held about other races aren't changing over time so people continue to avoid contact with other races	Student questionnaires
59	When people have had the same level of education, race doesn't stop them from mixing with each other	Student questionnaires
60	Being forced to work together with other race groups at school and university makes people more tolerant and more likely to mix across race	Student questionnaires
61	People prefer to talk to their friends in their home language.	Finchilescu *et al*., 2007
62	People do not mix socially with people of other races because they have different interests in sport, music, etc.	Finchilescu *et al*., 2007
63	People of one race who mix socially with people of other races are seen as dissociating themselves from their own race group.	Finchilescu *et al*., 2007
64	People of different race groups have different ways of behaving which makes it difficult for them to mix socially.	Finchilescu *et al*., 2007
65	It is difficult to mix with people of other races because they are often preoccupied with race issues.	Finchilescu *et al*., 2007
66	People generally have no understanding of the culture of people of other races.	Finchilescu *et al*., 2007
67	People just don’t want to have friends from other race groups.	Finchilescu *et al*., 2007
68	People of different race groups generally come from a different socio-economic class.	Finchilescu *et al*., 2007
69	People don't associate with Coloureds because they are perceived as uncivilised	Overheard in public (adapted to item form)
70	Black people are perceived as too loud and overbearing to associate with them	Overheard in public (adapted to item form)
71	The accents that the various race groups typically have irritate other race groups and prevent interracial contact	Overheard in public (adapted to item form)
72	Black people are usually perceived as lazy and this irritates people of other races so they don't mix with Black people	Overheard in public (adapted to item form)
73	Other race groups think White people are crazy so they avoid White people if they can	Overheard in public (adapted to item form)
74	Indians are the most isolated race group and prefer to stick to themselves	Overheard in public (adapted to item form)
75	Indians are known to cheat, steal and lie so other race groups avoid them	Overheard in public (adapted to item form)
76	Afrikaners are the reason other race groups don't mix with Whites	Overheard in public (adapted to item form)
77	People tend to frown upon the cultural activities of most Coloureds and would rather not approach them for that reason	Overheard in public (adapted to item form)
78	Coloureds are often considered to be dangerous and violent by other race groups so they tend to be avoided	Overheard in public (adapted to item form)
79	Black people are perceived as lazy and that irritates other races and they don't want to associate with Black people	Internet

80	Black people have a different mentality to other race groups and this causes a lack of interaction with them	Internet
81	White people are rude and disrespectful to other race groups which makes contact with Whites less likely	Internet
82	White people are the most overtly racist and that's why other race groups don't want to mix with them	Internet
83	Black people are the most likely to be seen as criminals who will do what they need to do to get what they want which makes other races avoid them	Internet
84	The biggest barrier to contact between people in South Africa is between Black people and Afrikaners because they victimise each other	Internet
85	Afrikaners are usually considered to be ignorant racists so people of other races don't want to make contact with them	Internet
86	Every person in South Africa has some kind of hatred towards another race which prevents them from mixing with those races	Internet
87	Some Black people feel that Whites are unwelcome settlers so they would rather not interact with Whites	Internet
88	Indians are considered to have too much interest in money and this puts other race groups off from mixing with them	Internet
89	Even when Apartheid is in the distant past, people will still self-segregate (stick to their own race groups)	Newspaper
90	People just want to be around others who are like them so if people of other race groups act the same they don't have problems with mixing	Newspaper
91	The area that people live in will largely determine whether they will mix with other races	Newspaper
92	What parents say about other races is the biggest determining factor for whether a person will mix across race groups	Newspaper
93	If people have the same accent irrespective of race then race is not a problem when mixing socially with others	Newspaper
94	People who have similar views and values will mix across race groups easily	Newspaper
95	People of certain race groups have designated spaces in public areas such as universities and members of other races just know not to go there	Newspaper
96	It's the subtle things that people of specific races do which make other races hesitant to have contact with them	Newspaper
97	People will use any excuse they possibly can so that they don't have to make contact with other race groups	Newspaper
98	Race groups generally tend to be angry with each other and this can be felt so people would rather not mix across races	Newspaper
99	Our political leaders are not doing enough to create more peaceful relations between people of different races	Newspaper
100	It is largely the responsibility of educators to create a language of tolerance so that more interracial mixing will take place	Newspaper
101	If people had more care and sensitivity towards each other on a daily basis there would be a lot more mixing across race groups	Newspaper
102	People are suspicious when someone of another race approaches them and that makes people reluctant to make contact	Book: Race Trouble
103	Policies banning racist discourse and action have not improved interracial contact	Book: Race Trouble
104	Race groups tend to accuse and blame each other for various problems in South Africa and this inhibits interracial mixing	Book: Race Trouble
105	Race and racial interaction are a problem that South Africans face	Book: Race Trouble

	on a daily basis	
106	Accusations of racism are so common these days that people are afraid of interacting with other race groups and being called racist	Book: Race Trouble
107	Whether people are urban or rural makes a big difference to the willingness of other races to approach them	Book: Race Trouble
108	The way a person from one race group will react to contact with someone from another race group is too unpredictable to be worth the risk	Book: Race Trouble
109	Blacks are considered to be incompetent freeloaders so other race groups dislike them and don't mix with them	Book: Race Trouble
110	Whites make other race groups feel inferior so other race groups don't like to interact with them	Book: Race Trouble
111	Whites are resentful that other race groups have moved into areas that were historically theirs so they avoid contact with people who aren't white	Book: Race Trouble
112	Black people are so oversensitive and tuned to misinterpret the actions of people of other races who approach them	Book: Race Trouble
113	Whites have the biggest challenge in approaching other race groups because they are held responsible for Apartheid and are vulnerable to hatred	Book: Race Trouble
114	People try so hard to avoid trouble with other race groups that they would rather not make contact with them	Book: Race Trouble
115	People want to protect and maintain the interests of their own race groups and don't want people of other race groups to disturb that	Book: Race Trouble
116	People change their behaviour when they interact with people of other race groups	Book: Race Trouble
117	People want to retain their racial and cultural identities so they don't want to mix with other race groups in case that changes	Book: Race Trouble
118	Different places are associated with different stereotypes about other races and this has an influence on interracial contact	Book: Race Trouble
119	The context is very important in determining whether people will mix across race groups	Book: Race Trouble
120	Different race groups experience the world differently and this makes it difficult for race groups to interact with each other	Book: Race Trouble
121	The kind of company that people keep will determine how willing they are to interact with other race groups	Book: Race Trouble
122	People feel like they have to have a reason to talk to people of other race groups before they can make contact	Book: Race Trouble
123	It's going to take a very long time for racial interaction to increase because South Africa's past is too deeply ingrained in people's lives	Book: Race Trouble
124	People don't mind interacting with someone of another race when there’s a clear and obvious reason to do it and both people know the reason	Focus groups
125	Whether people mix across races or not depends on the area because some areas are just very racist	Focus groups
126	Some races just know that other races generally don't like them so they stay away from those races	Focus groups
127	White people feel like they're being undermined by other race groups so they keep to themselves	Focus groups
128	Black people who act white are frowned upon by their communities because they are expected to act and speak within the confines of their culture	Focus groups
129	Other race groups don't typically approach Blacks because they usually assume Blacks can't speak English	Focus groups
130	The mentality and areas of the schools that people go to hugely	Focus groups

	affect how those people interact with other race groups	
131	Even within race groups there are barriers to contact such as whether people are educated or not ("cheeseboys" and "cheesegirls" from suburbs)	Focus groups
132	When Black people become Westernised through contact with the "White" world then their families distance themselves	Focus groups
133	Other race groups are happy to mix with Black people who are Westernised but not with Blacks who aren't	Focus groups
134	There are often more problems within each race group to do with contact and mixing because of different languages and cultures	Focus groups
135	Back people are considered to be stupid and lazy so other races don't mix with them	Focus groups
136	Black people feel a sense of entitlement which makes other races not want to mix with them	Focus groups
137	As White people get poorer they make more contact with other race groups	Focus groups
138	Today's youth is more interested in getting involved with their cultures and traditions so more mixing is happening across races	Focus groups
139	People avoid some races because their cultural traditions abhor them	Focus groups
140	Learning about the traditions of other cultures makes people much more understanding and tolerant	Focus groups
141	Some restaurants are known to be occupied more by certain race groups so some people won't go there to avoid those race groups	Focus groups
142	Younger people are much more likely to mix across race groups than older people in South Africa	Focus groups
143	Afrikaans and English white people are very different and English Whites are the preferred Whites for other race groups to associate with	Focus groups
144	It is entirely possible for South Africa to be a nation where race doesn't determine whether people will mix socially or not	Focus groups
145	The reason there are such race divisions in South Africa is because it is still a developing country	Focus groups
146	Different race groups have different political, social and economical opinions which prevents race groups from mixing	Focus groups
147	South Africa is still a new country after apartheid and that's not enough time to overcome the racial issues of the past but it will get better	Focus groups
148	Sometimes forced contact with other race groups makes people realise that what they thought about those race groups was wrong	Focus groups
149	Schools should concern themselves with encouraging contact between race groups under positive conditions so that they continue to mix across races	Focus groups
150	Cultural activities or norms are often misinterpreted by people of other race groups which causes offence and avoidance	Focus groups
151	The most problems with contact between race groups in South Africa is between Whites and Blacks	Focus groups
152	Indians aren't associated more with either blacks or whites but Coloureds are associated more with Blacks and this influences interracial interaction	Focus groups
153	Indians are the race group who least want to associate with other race groups	Focus groups
154	Indians are arrogant and proud and it prevents them from mixing across race groups and race groups mixing with them	Focus groups
155	Apartheid is definitely the biggest problem that prevents contact	Focus groups

	between race groups	
156	Race is a really sensitive issue that is avoided as a topic when different race groups interact so the topic is avoided anxiously	Focus groups
157	Joking about your own race makes it easier to interact with people of other race groups	Focus groups
158	The way a teacher teaches makes a huge difference to how the different race groups will interact in classes	Focus groups
159	Personality plays a big role in whether people will approach other races, sometimes a bigger role than anything else	Focus groups
160	The more extraverted a person is, the more likely they will approach someone of another race group	Focus groups
161	In new situations, people will automatically find others of the same race to talk to or sit with	Focus groups
162	Being able to speak your own language with someone is comforting, it's not so much about avoiding certain races	Focus groups
163	People are so scared of offending other races that they'd rather avoid talking to them	Focus groups
164	When approaching another race group there is always the threat of being rejected or embarrassed	Focus groups
165	Indians are avoided by other race groups because they are often assumed to be Muslims who are violent	Focus groups
166	If people have an attitude of openness to experience then they will mix with others regardless of race and what they've been told about other races	Focus groups
167	More mature people are the most likely to approach people of other race groups	Focus groups
168	People like to hate each other because they are different and race is just one of those differences	Focus groups
169	It's the names that races use to call each other that perpetuates the lack of interracial mixing	Focus groups
170	White people fear being persecuted by Black people because of Apartheid so Whites tend to avoid Blacks	Focus groups
171	When there is a group that has people of mixed races, the conversation and activity is often awkward	Focus groups
172	When people are in a group that has people of different races in it they are a lot more careful about what they say	Focus groups
173	The way race groups communicate with each other is just different so people stick with modes of communication that are familiar	Focus groups
174	The gender of the people makes a huge difference to whether they feel comfortable communicating across race groups	Focus groups
175	When people are of the same demographic it doesn't matter to them what the race of the people are that they interact with	Focus groups
176	The safety of the area makes a big difference to whether people will mix socially across races or talk to each other	Focus groups
177	People don't like to approach other race groups because of the way they smell	Focus groups
178	When many different races are in one place then barriers to contact come down	Focus groups
179	A lot of parents and families try to keep their children from interacting with other races	Focus groups
180	The amount of mixed race couples around these days goes a long way to bring down barriers between races which prevent contact	Focus groups
181	It's not that people discriminate against race groups, it's the different cultures that prevent people from mixing	Focus groups

182	A lot of people consider Indians to be dirty so they avoid them	Focus groups
183	A lot of people think Coloureds are rough and uncultured	Focus groups
184	Whites and Blacks are actually more likely to mix socially than any race group with any other race group	Focus groups
185	The more people are exposed to other races, the more likely they are to mix socially with them	Focus groups
186	Most of the reasons people don't mix with other races are just in their imaginations	Focus groups
187	Coloureds are usually considered to be the quickest race group to become violent	Focus groups
188	As soon as someone experiences the accent of someone from another race group they would rather avoid contact with them	Focus groups
189	Colour is becoming less and less of an issue in people's lives so there is more interracial contact	Focus groups
190	Black people are usually the most friendly race when encountering other race groups	Focus groups
191	Growing up around people of other races is a good indicator that someone will interact with people of other race groups	Focus groups
192	Race is not an issue when it comes to contact, it's actually got to do with class	Focus groups
193	The different races have different ways of treating animals and that has an influence on racial mixing	Focus groups
194	People simultaneously try to embrace and ignore racial differences and this leads to problems in interracial contact	Focus groups
195	People are starting to adapt traditions and activities from other cultures and this improves relation between races	Focus groups
196	People don't like to mix with another race group for fear of that race group wanting others to conform to their identities as members of that race	Focus groups
197	Most people are ignorant about the lives, experiences, cultures, and identities of other race groups and are happy to keep it that way	Focus groups
198	BEE is causing a lot of tensions between races and minimising interracial mixing	Focus groups

Appendix E: Final Q-set

Items inhibiting interracial contact

1. People would like to connect with other race groups but they just don't know how
2. Race issues and racism continue to dominate the media which creates divisions between races
3. When approaching another race group there is always the threat of being rejected or embarrassed
4. Politicians playing the race card creates divisions between races
5. The use of offensive names to identify other race groups inhibits interracial mixing
6. Stereotypes about other races inhibit interracial mixing
7. Blaming other race groups for the problems in South Africa inhibits interracial mixing
8. People want to retain their racial identities so they don't want to mix with other race groups
9. BEE (Black Economic Empowerment) is causing a lot of tensions between races
10. People are anxious about interacting with people of other race groups
11. Continual requests to specify race (e.g. on application forms) maintains divisions between races
12. In new situations, people will automatically find others of the same race to talk to or sit with
13. It is often the accents of people from other races that prevents different race groups from mixing
14. The legacy of apartheid is definitely the biggest problem that prevents contact between race groups
15. If people feel their safety is threatened they are less likely to make contact with other race groups
16. Fears about being called racist prevents different race groups from mixing
17. Race issues always come up when people mix across race groups
18. People don't mix across races because they fear that members of their own race will disapprove of them
19. The fear of being misunderstood by other race groups prevents interracial contact
20. Cultural differences are one of the main reasons why people don't mix across races
21. The lack of trust between people of different race groups inhibits interracial contact
22. Differences in ways of behaving and communicating make it difficult for different race groups to interact
23. People thinking that their race group is superior to other race groups prevents mixing across races
24. Policies banning racism have had limited success

Items facilitating interracial contact

25. When people are put into teams or groups with other races they are more focused on being a team than on race issues
26. All race groups g*et al*ong better when they feel like they have a common identity as South Africans
27. Working on the same level with people of other races makes people more willing to interact with other race groups
28. Being able to joke about your own race makes it easier to interact with people of other race groups
29. Mixing across races is easier when people speak the same language
30. When people are of the same class and socioeconomic status then they are more willing to interact

31. The more people are exposed to other races, the more likely they are to mix socially with them
32. Seeing friends interact across race groups makes people willing to do the same
33. Interest in other cultures has made South Africans more likely to mix across race groups
34. When there is less tension about the legacy of apartheid people of different races interact more freely
35. Contact with other race groups makes people re-evaluate their beliefs about those race groups
36. Adopting traditions and activities from other race groups improves relations between races
37. When people have had the same level of education, race doesn't stop them from mixing with each other
38. Being at school with people of other races makes people more willing to interact with other race groups
39. People from different race groups will interact when they have similar world views
40. People easily mix with people of other races when they have similar interests in sport, music, etc.
41. Living in mixed-race neighbourhoods makes people more willing to interact with other race groups
42. The current youth of South Africa are much more likely to mix across races than older people
43. Nowadays people of different races want to work together to build a better country
44. People who have similar views and values will mix across race groups easily
45. Learning about the customs of other race groups makes interracial contact more likely
46. Being raised in tolerant families makes people more willing to mix with people of other races
47. Growing up in a mixed-race environment is a good indicator of willingness to interact with people of other race groups
48. Some race groups are more inclined than others to make contact with other race groups

Neutral items

49. People don't deliberately avoid other race groups, it often just turns out that way
50. The area of South Africa that people live in will largely determine whether they will mix with other races
51. There are as many problems within race groups as there are across race groups
52. It is largely the responsibility of politicians and leaders to promote racial tolerance
53. The gender of people makes a huge difference to whether they feel comfortable communicating across race groups
54. People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups
55. Personality plays a big role in whether people will mix across races
56. The context is very important in determining whether people will mix across race groups

Appendix F: Demographics Questionnaire

Name: _____
Student number: _____
Email: _____
Date: _____

Please give your age:

Years:	Months:

Please put a distinct cross (x) next to the appropriate demographic:

Gender:

Male	Female

Race:

Black	White	Indian	Coloured	Other

First (home) language:

English	Afrikaans	IsiZulu	IsiXhosa	Sesotho	Sepedi
Setswana	SiSwati	Tshivenda	Xitsonga	IsiNdebele	Other

Year of study:

1	2	3	4	5	6

Condition of instruction for the Q-sort:
Please arrange the items according to how much you agree with them in relation to interracial mixing in South Africa.

Appendix G: Factor arrays with Q-sort values only

Table 9
Factor array Q-sort values by item

	Factors			
Items	1	2	3	4
Mixing across races is easier when people speak the same language	1	0	0	0
Adopting traditions and activities from other race groups improves relations between races	0	0	0	0
The current youth of South Africa are much more likely to mix across races than older people	4	3	2	5
The use of offensive names to identify other race groups inhibits interracial mixing	4	3	6	3
Interest in other cultures has made South Africans more likely to mix across race groups	1	0	-1	1
Race issues always come up when people mix across race groups	-4	-2	-3	-5
Working on the same level with people of other races makes people more willing to interact with other race groups	0	2	0	2
Some race groups are more inclined than others to make contact with other race groups	-1	1	-1	-2
People are anxious about interacting with people of other race groups	0	0	-1	-4
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-4	-3	-6	-4
It is often the accents of people from other races that prevents different race groups from mixing	-6	-4	-6	-5
People who have similar views and values will mix across race groups easily	3	0	0	3
People don't mix across races because they fear that members of their own race will disapprove of them	-5	-2	-3	-1
Policies banning racism have had limited success	-3	1	-3	-2
Race issues and racism continue to dominate the media which creates divisions between races	-1	3	1	2
All race groups get along better when they feel like they have a common identity as South Africans	0	-3	-2	1
Blaming other race groups for the problems in South Africa inhibits interracial mixing	3	5	3	6
Learning about the customs of other race groups makes interracial contact more likely	1	-1	-2	2
Contact with other race groups makes people re-evaluate their beliefs about those race groups	3	-1	2	0
If people feel their safety is threatened they are less likely to make contact with other race groups	0	4	4	1
Fears about being called racist prevents different race groups from mixing	-5	0	-4	-4
When people are of the same class and socioeconomic status then they are more willing to interact	1	-2	1	2
Being able to joke about your own race makes it easier to interact with people of other race groups	0	3	1	-4
Growing up in a mixed-race environment is a good indicator of willingness to interact with people of other race groups	4	0	-1	-1
People want to retain their racial identities so they don't want to mix with other race groups	-4	-1	-4	-6
People from different race groups will interact when they have similar world views	0	-3	0	2
Living in mixed-race neighbourhoods makes people more willing to interact with other race groups	2	-2	-4	0
The lack of trust between people of different race groups inhibits interracial contact	-1	1	2	-3

Stereotypes about other races inhibit interracial mixing	5	2	2	-1
Differences in ways of behaving and communicating make it difficult for different race groups to interact	-1	2	-1	-3
People thinking that their race group is superior to other race groups prevents mixing across races	3	6	3	0
Seeing friends interact across race groups makes people willing to do the same	2	-4	0	-1
Politicians playing the race card creates divisions between races	1	5	6	6
The context is very important in determining whether people will mix across race groups	2	2	-2	-2
There are as many problems within race groups as there are across race groups	2	0	0	5
Being raised in tolerant families makes people more willing to mix with people of other races	6	2	3	2
People don't deliberately avoid other race groups, it often just turns out that way	-3	-5	0	0
When there is less tension about the legacy of apartheid people of different races interact more freely	-2	4	4	4
The fear of being misunderstood by other race groups prevents interracial contact	-4	-1	-2	1
People would like to connect with other race groups but they just don't know how	-2	1	-4	-2
People easily mix with people of other races when they have similar interests in sport, music, etc.	2	-2	2	4
The more people are exposed to other races, the more likely they are to mix socially with them	5	1	1	-1
Personality plays a big role in whether people will mix across races	6	1	3	1
When approaching another race group there is always the threat of being rejected or embarrassed	-3	2	-1	-3
Nowadays people of different races want to work together to build a better country	1	-1	-5	0
The area of South Africa that people live in will largely determine whether they will mix with other races	0	4	-3	-1
Being at school with people of other races makes people more willing to interact with other race groups	2	-5	-2	0
BEE (Black Economic Empowerment) is causing a lot of tensions between races	-2	6	2	4
When people are put into teams or groups with other races they are more focused on being a team than on race issues	4	-4	1	4
Continual requests to specify race (e.g. on application forms) maintains divisions between races	-2	-2	4	1
Cultural differences are one of the main reasons why people don't mix across races	-3	4	1	-2
The legacy of apartheid is definitely the biggest problem that prevents contact between race groups	-1	3	5	-2
People are just as hesitant about approaching strangers in their own race group as they are with strangers in other race groups	-2	-4	-5	3
When people have had the same level of education, race doesn't stop them from mixing with each other	-2	-6	-2	3
In new situations, people will automatically find others of the same race to talk to or sit with	-1	-1	5	-6
It is largely the responsibility of politicians and leaders to promote racial tolerance	-6	-6	4	-3

Appendix H: Characterising and Distinguishing Items for all Factors

Table 10

Characterising items for Factor 1

Statement	**Z-SCORES**
Being raised in tolerant families makes people more willing to mix with people of other races	2.321
Personality plays a big role in whether people will mix across races	2.183
The more people are exposed to other races, the more likely they are to mix socially with them	1.664
Stereotypes about other races inhibit interracial mixing	1.218
The current youth of South Africa are much more likely to mix across races than older people	1.191
The use of offensive names to identify other race groups inhibits interracial mixing	1.073
When people are put into teams or groups with other races they are more focused on being a team than on race issues	1.018
Policies banning racism have had limited success	-1.038
Cultural differences are one of the main reasons why people don't mix across races	-1.042
When approaching another race group there is always the threat of being rejected or embarrassed	-1.086
People don't deliberately avoid other race groups, it often just turns out that way	-1.089
Race issues always come up when people mix across race groups	-1.263
People want to retain their racial identities so they don't want to mix with other race groups	-1.304
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-1.419
The fear of being misunderstood by other race groups prevents interracial contact	-1.601
People don't mix across races because they fear that members of their own race will disapprove of them	-1.611
Fears about being called racist prevents different race groups from mixing	-1.633
It is largely the responsibility of politicians and leaders to promote racial tolerance	-2.073
It is often the accents of people from other races that prevents different race groups from mixing	-2.384

Table 11

Characterising items for Factor 2

Statement	**Z-SCORES**
People thinking that their race group is superior to other race groups prevents mixing across races	1.985
BEE (Black Economic Empowerment) is causing a lot of tensions between races	1.767
Blaming other race groups for the problems in South Africa inhibits interracial mixing	1.715
Politicians playing the race card creates divisions between races	1.638
The area of South Africa that people live in will largely determine whether they will mix with other races	1.386
When there is less tension about the legacy of apartheid people of different races interact more freely	1.358
Cultural differences are one of the main reasons why people don't mix across races	1.292
If people feel their safety is threatened they are less likely to make contact with other race groups	1.219
The legacy of apartheid is definitely the biggest problem that prevents contact between race groups	1.183
The use of offensive names to identify other race groups inhibits interracial mixing	1.163
Race issues and racism continue to dominate the media which creates divisions between races	1.052
Seeing friends interact across race groups makes people willing to do the same	-1.111
It is often the accents of people from other races that prevents different race groups from mixing	-1.154
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race group	-1.346
Being at school with people of other races makes people more willing to interact with other race groups	-1.641
People don't deliberately avoid other race groups, it often just turns out that way	-1.778
It is largely the responsibility of politicians and leaders to promote racial tolerance	-1.819
When people have had the same level of education, race doesn't stop them from mixing with each other	-2.034

Table 12

Characterising items for Factor 3

Statement	**Z-SCORES**
Politicians playing the race card creates divisions between races	2.318
The use of offensive names to identify other race groups inhibits interracial mixing	1.728
In new situations, people will automatically find others of the same race to talk to or sit with	1.547
The legacy of apartheid is definitely the biggest problem that prevents contact between race groups	1.478
Continual requests to specify race (e.g. on application forms) maintains divisions between races	1.458
It is largely the responsibility of politicians and leaders to promote racial tolerance	1.440
When there is less tension about the legacy of apartheid people of different races interact more freely	1.363
If people feel their safety is threatened they are less likely to make contact with other race groups	1.319
People thinking that their race group is superior to other race groups prevents mixing across races	1.130
Blaming other race groups for the problems in South Africa inhibits interracial mixing	1.114
Personality plays a big role in whether people will mix across races	1.061
Fears about being called racist prevents different race groups from mixing	-1.238
People want to retain their racial identities so they don't want to mix with other race groups	-1.318
People would like to connect with other race groups but they just don't know how	-1.630
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups	-1.716
Nowadays people of different races want to work together to build a better country	-1.780
It is often the accents of people from other races that prevents different race groups from mixing	-1.867
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-2.139

Table 13

Characterising items for Factor 4

Statement	**Z-SCORES**
Blaming other race groups for the problems in South Africa inhibits interracial mixing	1.978
Politicians playing the race card creates divisions between races	1.754
The current youth of South Africa are much more likely to mix across races than older people	1.684
There are as many problems within race groups as there are across race groups	1.606
BEE (Black Economic Empowerment) is causing a lot of tensions between races	1.444
People easily mix with people of other races when they have similar interests in sport, music, etc.	1.444
When people are put into teams or groups with other races they are more focused on being a team than on race issues	1.290
When there is less tension about the legacy of apartheid people of different races interact more freely	1.150
When people have had the same level of education, race doesn't stop them from mixing with each other	1.123
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups	1.035
People who have similar views and values will mix across race groups easily	1.014
Differences in ways of behaving and communicating make it difficult for different race groups to interact	-1.021
The lack of trust between people of different race groups inhibits interracial contact	-1.079
People are anxious about interacting with people of other race groups	-1.129
Being able to joke about your own race makes it easier to interact with people of other race groups	-1.151
Fears about being called racist prevents different race groups from mixing	-1.442
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-1.445
Race issues always come up when people mix across race groups	-1.471
It is often the accents of people from other races that prevents different race groups from mixing	-1.708
In new situations, people will automatically find others of the same race to talk to or sit with	-1.914
People want to retain their racial identities so they don't want to mix with other race groups	-1.957

Table 14

Distinguishing statements for Factor 1

Factor	**1**		**2**		**3**		**4**	
Statement	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**
Being raised in tolerant families makes people more willing to mix with people of other races	6	2.32*	2	0.90	3	0.97	2	0.52
Personality plays a big role in whether people will mix across races	6	2.18*	1	0.28	3	1.06	1	0.25
The more people are exposed to other races, the more likely they are to mix socially with them	5	1.66*	1	0.25	1	0.43	-1	-0.40
Growing up in a mixed-race environment is a good indicator of willingness to interact with people of other race groups	4	0.98*	0	-0.26	-1	-0.39	-1	-0.37
Seeing friends interact across race groups makes people willing to do the same	2	0.72*	-4	-1.11	0	-0.16	-1	-0.42
Living in mixed-race neighbourhoods makes people more willing to interact with other race groups	2	0.69*	-2	-0.66	-4	-0.95	0	-0.15
There are as many problems within race groups as there are across race groups	2	0.58*	0	-0.05	0	-0.02	5	1.61
Politicians playing the race card creates divisions between races	1	0.51*	5	1.64	6	2.32	6	1.75
In new situations, people will automatically find others of the same race to talk to or sit with	-1	-0.06	-1	-0.56	5	1.55	-6	-1.91
The lack of trust between people of different race groups inhibits interracial contact	-1	-0.21*	1	0.38	2	0.51	-3	-1.08
The legacy of apartheid is definitely the biggest problem that prevents contact between race groups	-1	-0.28*	3	1.18	5	1.48	-2	-0.86
When there is less tension about the legacy of apartheid people of different races interact more freely	-2	-0.33*	4	1.36	4	1.36	4	1.15
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups	-2	-0.52*	-4	-1.35	-5	-1 72	3	1.04
BEE (Black Economic Empowerment) is causing a lot of tensions between races	-2	-0.52*	6	1.77	2	0.83	4	1.44
People don't deliberately avoid other race groups, it often just turns out that way	-3	-1.09*	-5	-1.78	0	-0.01	0	-0.23
The fear of being misunderstood by other race groups prevents interracial contact	-4	-1.60*	-1	-0.55	-2	-0.44	1	0.40
People don't mix across races because they fear that members of their own race will disapprove of them	-5	-1.61*	-2	-0.65	-3	-0.81	-1	-0.38
It is often the accents of people from other races that prevents different race groups from mixing	-6	-2.38*	-4	-1.15	-6	-1.87	-5	-1.71

Note. ($p < .05$; asterisk (*) indicates significance at $p < .01$). Both the factor Q-sort value (Q) and the z-score (Z) are shown.

Table 15

Distinguishing Statements for Factor 2

Factors	**1**		**2**		**3**		**4**	
Statement	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**
People thinking that their race group is superior to other race groups prevents mixing across races	3	0.81	6	1.99*	3	1.13	0	0.19
The area of South Africa that people live in will largely determine whether they will mix with other races	0	0.03	4	1.39*	-3	-0.95	-1	-0.35
Cultural differences are one of the main reasons why people don't mix across races	-3	-1.04	4	1.29*	1	0.27	-2	-0.92
When approaching another race group there is always the threat of being rejected or embarrassed	-3	-1.09	2	0.97*	-1	-0.25	-3	-0.96
Differences in ways of behaving and communicating make it difficult for different race groups to interact	-1	-0.22	2	0.78*	-1	-0.29	-3	-1.02
Some race groups are more inclined than others to make contact with other race groups	-1	-0.07	1	0.40	-1	-0.37	-2	-0.76
People would like to connect with other race groups but they just don't know how	-2	-0.34	1	0.37*	-4	-1.63	-2	-0.66
Policies banning racism have had limited success	-3	-1.04	1	0.16	-3	-0.86	-2	-0.45
Fears about being called racist prevents different race groups from mixing	-5	-1.63	0	-0.29*	-4	-1.24	-4	-1.44
People want to retain their racial identities so they don't want to mix with other race groups	-4	-1.30	-1	-0.34*	-4	-1.32	-6	-1.96
Nowadays people of different races want to work together to build a better country	1	0.29	-1	-0.42	-5	-1.78	0	0.24
Contact with other race groups makes people re-evaluate their beliefs about those race groups	3	0.75	-1	-0.53*	2	0.52	0	0.19
In new situations, people will automatically find others of the same race to talk to or sit with	-1	-0.06	-1	-0.56	5	1.55	-6	-1.91
People easily mix with people of other races when they have similar interests in sport, music, etc.	2	0.71	-2	-0.57*	2	0.52	4	1.44
When people are of the same class and socioeconomic status then they are more willing to interact	1	0.57	-2	-0.70*	1	0.10	2	0.60
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-4	-1.42	-3	-0.93	-6	-2.14	-4	-1.45
People from different race groups will interact when they have similar world views	0	0.17	-3	-0.94*	0	0.01	2	0.66
When people are put into teams or groups with other races they are more focused on being a team than on race issues	4	1.02	-4	-0.97*	1	0.15	4	1.29
Seeing friends interact across race groups makes people willing to do the same	2	0.72	-4	-1.11*	0	-0.16	-1	-0.42
It is often the accents of people from other races that prevents different race groups from mixing	-6	-2.38	-4	-1.15	-6	-1.87	-5	-1.71
Being at school with people of other races makes people more willing to interact with	2	0.62	-5	-1.64*	-2	-0.60	0	0.23

other race groups								
People don't deliberately avoid other race groups, it often just turns out that way	-3	-1.09	-5	-1.78*	0	-0.01	0	-0.23
When people have had the same level of education, race doesn't stop them from mixing with each other	-2	-0.71	-6	-2.03*	-2	-0.64	3	1.12

Note. (p< .05; asterisk (*) indicates significance at p < .01). Both the factor Q-Sort Value (Q) and the z-Score (Z) are shown.

Table 16

Distinguishing Statements for Factor 3

Factors	**1**		**2**		**3**		**4**	
Statement	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**
Politicians playing the race card creates divisions between races	1	0.51	5	1.64	6	2.32	6	1.75
The use of offensive names to identify other race groups inhibits interracial mixing	4	1.07	3	1.16	6	1.73	3	0.91
In new situations, people will automatically find others of the same race to talk to or sit with	-1	-0.06	-1	-0.56	5	1.55*	-6	-1.91
Continual requests to specify race (e.g. on application forms) maintains divisions between races	-2	-0.83	-2	-0.73	4	1.46*	1	0.36
It is largely the responsibility of politicians and leaders to promote racial tolerance	-6	-2.07	-6	-1.82	4	1.44*	-3	-0.93
55. Personality plays a big role in whether people will mix across races	6	2.18	1	0.28	3	1.06*	1	0.25
BEE (Black Economic Empowerment) is causing a lot of tensions between races	-2	-0.52	6	1.77	2	0.83*	4	1.44
Cultural differences are one of the main reasons why people don't mix across races	-3	-1.04	4	1.29	1	0.27*	-2	-0.92
When people are put into teams or groups with other races they are more focused on being a team than on race issues	4	1.02	-4	-0.97	1	0.15*	4	1.29
When people are of the same class and socioeconomic status then they are more willing to interact	1	0.57	-2	-0.70	1	0.10	2	0.60
When approaching another race group there is always the threat of being rejected or embarrassed	-3	-1.09	2	0.97	-1	-0.25*	-3	-0.96
Being at school with people of other races makes people more willing to interact with other race groups	2	0.62	-5	-1.64	-2	-0.60*	0	0.23
The area of South Africa that people live in will largely determine whether they will mix with other races	0	0.03	4	1.39	-3	-0.95*	-1	-0.35
People would like to connect with other race groups but they just don't know how	-2	-0.34	1	0.37	-4	-1.63*	-2	-0.66
Nowadays people of different races want to work together to build a better country	1	0.29	-1	-0.42	-5	-1.78*	0	0.24
The gender of people makes a huge difference to whether they feel comfortable communicating across race groups	-4	-1.42	-3	-0.93	-6	-2.14*	-4	-1.45

Note.(p< .05; asterisk (*) indicates significance at p < .01). Both the factor Q-Sort Value (Q) and the z-Score (Z) are shown.

Table 17

Distinguishing Statements for Factor 4

Factors	**1**		**2**		**3**		**4**	
Statement	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**	**Q**	**Z**
The current youth of South Africa are much more likely to mix across races than older people	4	1.19	3	0.99	2	0.91	5	1.68
There are as many problems within race groups as there are across race groups	2	0.58	0	-0.05	0	-0.02	5	1.61*
People easily mix with people of other races when they have similar interests in sport, music, etc.	2	0.71	-2	-0.57	2	0.52	4	1.44*
When people have had the same level of education, race doesn't stop them from mixing with each other	-2	-0.71	-6	-2.03	-2	-0.64	3	1.12*
People are just as hesitant when approaching strangers from their own race groups as they are when approaching strangers from other race groups	-2	-0.52	-4	-1.35	-5	-1.72	3	1.04*
People from different race groups will interact when they have similar world views	0	0.17	-3	-0.94	0	0.01	2	0.66
The fear of being misunderstood by other race groups prevents interracial contact	-4	-1.60	-1	-0.55	-2	-0.44	1	0.40*
Continual requests to specify race (e.g. on application forms) maintains divisions between races	-2	-0.83	-2	-0.73	4	1.46	1	0.36*
People thinking that their race group is superior to other race groups prevents mixing across races	3	0.81	6	1.99	3	1.13	0	0.19*
Living in mixed-race neighbourhoods makes people more willing to interact with other race groups	2	0.69	-2	-0.66	-4	-0.95	0	-0.15
The more people are exposed to other races, the more likely they are to mix socially with them	5	1.66	1	0.25	1	0.43	-1	-0.40
Stereotypes about other races inhibit interracial mixing	5	1.22	2	0.99	2	0.60	-1	-0.44*
The legacy of apartheid is definitely the biggest problem that prevents contact between race groups	-1	-0.28	3	1.18	5	1.48	-2	-0.86*
It is largely the responsibility of politicians and leaders to promote racial tolerance	-6	-2.07	-6	-1.82	4	1.44	-3	-0.93*
Differences in ways of behaving and communicating make it difficult for different race groups to interact	-1	-0.22	2	0.78	-1	-0.29	-3	-1.02*
The lack of trust between people of different race groups inhibits interracial contact	-1	-0.21	1	0.38	2	0.51	-3	-1.08*
People are anxious about interacting with people of other race groups	0	0.00	0	-0.22	-1	-0.27	-4	-1.13*
In new situations, people will automatically find others of the same race to talk to or sit with	-1	-0.06	-1	-0.56	5	1.55	-6	-1.91*
People want to retain their racial identities so they don't want to mix with other race groups	-4	-1.30	-1	-0.34	-4	-1.32	-6	-1.96*

Note. ($p < .05$; asterisk (*) indicates significance at $p < .01$). Both the factor Q-Sort Value (Q) and the z-Score (Z) are shown.