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Turnover Intentions and Attributes of the Call Centre Environment: the Moderating Effect of the Hardy Personality.

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A dissertation submitted to the School of Psychology, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements of the Degree of Bachelor of Arts with Masters

February, 2009

DECLARATION

I hereby declare that this research report/thesis is my own, unaided work. It is being submitted in partial fulfillment for the degree of Master of Arts by Coursework and Research Report in the Field of Industrial Psychology at the University of the Witwatersrand, Johannesburg. It has not been submitted before for the purpose of any other degree or examination at any other University

Teodora Kazalarska

16th February 2009

To my family and fiancée Emil with sincere thanks for all their love and encouragement during the writing of the thesis.

To Mike Greyling for dedication and support!

To my friend Gillian Hulley for her constant support during the years at Wits and the during the writing of the thesis.

To Prof. James Fisher- I will always remember you!

ACKNOWLEDGEMENTS

I wish to thank my fiancée, father and mother for their support through this stressful period. I would also like to thank my supervisor, Mike Greyling and Prof. James Fisher, for travelling this journey with me and for having all the patience in the world. I wish to thank my classmates for their assistance in finding participants willing to complete my questionnaires and also for their generosity and support. I would also like to thank Gillian Hulley for her encouragement and support.

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THEORETICAL AND CONCEPTUAL BACKGROUND

CHAPTER ONE: NEW WORK PRACTICES AND THE CALL CENTRE INDUSTRY

Research Report Overview

This research aims to adopt a perspective of the call centre industry and to highlight some of the key challenges that arise within this industry in South Africa. Call centres have become a core function in the operation of many businesses and have proven to be highly beneficial for organisations (Owen, 2002). Nevertheless, the work environment remains characterised by low quality output, poor job attitudes, high stress levels, monotonous and repetitive tasks, and demanding interpersonal and technical skills (Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002). This may explain why the employees' commitment levels are low and why the work climate is poor. The high levels of call monitoring and perceived unfairness of it may contribute towards the mayincreasingly high levels of stress and turnover intentions in the call centre industry (Little and Dean, 2006; Holdsworth and Cartwright, 2003). This research project aims to examine the South African call centre environment with particular reference to the turnover intentions and employees' perceptions and attributes of that environment.

Workforce turnover is an issue of critical importance to managers (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004; Siong, Mellor, Moore and Firth, 2006). Lack of employee continuity and organisational stability, the high costs involved in the selection and training of new staff and diminished productivity are some of the challenges that arise as a consequence of turnover (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004; Siong, Mellor, Moore and Firth, 2006). A recent industry study of call centres in Australia

reported full-time staff turnover through resignations as being 26% per annum and part-time staff turnover of 40% per annum (Wallace and Eagleson, 2004). The research findings of South African researches within the call centre industry done by Lewis (2001) and Owen (2002) suggest that South Africa has a turnover rate of about 30% a year.

The cost to an organisation of replacing a single call centre agent is about $15,000 in Australia (Wallace and Eagleson, 2004) and R110 000 in South Africa (Owen, 2002). This research endeavours to identify the factors which precede employee turnover in order to assist management to institute measures to prevent it. Some of the preceding factors that this study focuses on include organisational commitment, climate, and the perceived fairness of electronic performance monitoring. In addition, individual differences or personality characteristics such as hardiness, self-esteem, self efficacy and positive/ negative affectivity are examined in terms of their moderating effect on the above relationship (Miller and Fisher, 2005).

It has been argued that dispositional traits affect the turnover intentions (Chiu and Francesco, 2003) and, the focus of this research report is to examine whether hardiness moderates the relationship between organisational climate, the perceived fairness of EPM, organisational commitment and turnover intentions.

The call centre industry is expanding at a rapid pace. The call centre industry has been reported to be the fastest growing industry, expanding from 10% in 2001 to 14% in 2005 (www.Callrica.co.za). Organisations introduce call centres in order to provide better customer service and to manage customer relations cost effectively. Call centres introduce improved infrastructures and more advanced technology as a result of the need for bigger, better, faster and ever more cost-effective communication (Holdsworth and Cartwright, 2003). However, Little and Dean (2006) argue that notwithstanding the recent growth of the call centre

industry, it has been associated with negative publicity in terms of the way it is managed. Further reported disadvantages of call centres include high levels of stress and turnover (Little and Dean, 2006; Holdsworth and Cartwright, 2003).

Research in the call centre industry world wide suggests that the stressful environment and high turnover rates are associated with high levels of electronic performance monitoring, control and poor work climate (Holman, 2002; 2005; Taylor and Bain, 1999; Little and Dean, 2006; Holdsworth and Cartwright, 2003). In addition, there is a positive correlation between turnover intentions or actual turnover on the one hand and organisational commitment and personal characteristics, on the other (Carmeli and Gefen, 2005; Chiu and Francesco, 2003). For the purpose of this study the turnover intention or withdrawal intentions will be examined in relation to organisational climate, perceived fairness of electronic performance monitoring (EPM), organisational commitment and a personality characteristic as a moderating variable. The starting point in this study is to provide an extensive and clear picture of the notion of a call centre and to expand upon the role of technology and the work practices within call centres.

Technology and Modern Working Practices

The world of work has seen rapid transformation (Eason, 2002). Computer technology organises and determines modern-day companies. The management practices and the job design are all based on technological determinism (Miller and Fisher, 2005). Organisations of the 21st century are dependent on information systems, more specifically computers, telecommunications, the internet and network intelligence. These information technologies have replaced the traditional modes of human interaction. Therefore, some theorists, like Morgan (1997) and Eason (2002) call the organisations of today 'virtual organisations'. These types of organisations are most prevalent in the financial and service sectors.

The developments of informational technology and network intelligence provide a completely different twist to the information processing within organisations and its implications for organisational climate, performance feedback and commitment. Morgan (1997) argues that the information systems are embedded in the organisational design, thus replacing more traditional human interactions, and eliminating clerks and middle managers. Furthermore, the information systems and technologies have changed the very concept of an organisation, in terms of physical boundaries and distinct workforce. Boundaries and patterns of membership are dissolved (Morgan, 1997; Eason, 2002). In such organisations of the technological, modern world it is difficult to identify who works for whom.

The modern day technology in organisations has clear advantages with corporations being able to overcome the constraints of space and time and the physical boundaries of the organisation, as well as providing knowledge to workers, and empowering them in turn (Morgan, 1997; Eason, 2002). At the same time, computer systems have a pervasive impact on the nature of the job design, work climate, stress and well-being, which in turn could influence turnover intentions and actual turnover (Wickens and Hollands, 2000; Eason, 2002). Information and computer technologies are central characteristic of the call centre environment. In the following two sections, other vital parts of call centres will be examined. Certain trends in the call centre environment, the notion of a call centre and the role of its operators will be examined.

The Call Centre Industry

Modern day information technologies are an inextricable part of the call centre environment, the work design and its organisation. Some call centres include "automatic call distribution systems, interactive voice recognition or web enablement/joint browsing" and "individualised electronic monitoring and reporting

systems" (Holman, 2005, p.112). Technologies can aid efficiency, cut costs, improve customer service and increase revenue. Marr and Parry (2004) suggest that call centres are changing the way companies communicate with customers and are a strategic asset in delivering exceptional service quality. Cherns (1987) argues that whilst technical systems are crucial in call centres, social systems, the organisational climate and the fairness of these technical systems are of equal importance. This needs to be taken into consideration by the stakeholders involved in the design and implementation of call centre technology, which in turn can affect the final form of technology (Holman, 2005). Within the call centre industry, technology is embedded in every simple task, the use of scripts or formal procedures. These call centre technological systems could have an enduring effect on aspects of the call centre agents' attitudes, perceptions and behaviours (i.e. affect on commitment, fairness perceptions, perceived organisational climate, intentions to leave, etc.).

Call centres have become an integral part of the global economy. Marr and Parry (2004) and Frenkel, Korczynski, Shire and Tam, (1998) argue that call centres play an essential role in today's business world and are often a primary source of contact for customers. The prevalence of call centres is associated with the potential advantages they offer to organisations and individuals/customers that use them. Some of the benefits call centres provide include reduced costs, improve customer facilities, an increase in the number of jobs and new revenues for organisational growth. According to Marr and Parry (2004) and Frenkel, et al (1998), call centres allow a company to build, maintain and manage customer relations by solving problems, resolving complaints quickly and being available 24-hour a day, and seven days a week. However, call centres and the work performed may have a negative effect on employees of call centres.

What is a Call Centre and the Call Centre Operator's Role

A call centre is a modern-day, computer and telephone-based organisation. Omar (2001) and Taylor and Bain (1999) have defined a call centre as a large, centralised, open-plan office with workstations that include a computer, a telephone set or headset connected to a telecom switch, and one or more supervisor stations. A call centre receives inbound or makes outbound telephone calls (Omar, 2001; Taylor and Bain, 1999). Calls are processed and controlled either by an Automatic Call Distribution (ACD) or by a predictive dialling system (Taylor and Bain, 1999). These are some of the many technologies employed within call centres. The ACD and Interactive Voice Recognition (IVR) system, etc. are central to the operation of the call centre. According to Taylor and Bain (1999), these technologies are adopted by organisations in order to save costs.

Call centres seem to have the potential to completely replace face-to-face customer contacts through branch networks in services in the future (Malhotra and Mukherjee, 2004). Barker (1998, in Malhotra and Mukherjee, 2004) points out that approximately two-thirds of all customer interaction with organisations in the UK now occur through call centres alone. Customer-contact employees, i.e. those employees who interact directly with customers over the phone, are called "call centre operators" or "call centre representatives". In this research report the acronym CCO(s) will be used for the term- call centre operator(s). CCOs are important for organisations since they provide a link between the external customer and environment and the internal operations of the organisation (Malhotra and Mukherjee, 2004). In addition, CCOs represent the organisation and influence the service quality perceptions of the customer. Service quality and professionalism are vital to the call centre business as the primary purpose of most call centres is to assist customers.

The term “call centre” is a generic term referring to help desks, information lines or customer service centres, including customer support, operator services, directory assistance, credit services, card services, inbound and outbound telemarketing and web-based services (Workman and Bommer, 2004).

The above definition of call centres presents two distinctive features that flow from the factors discussed thus far in this chapter, namely call centre technology and customer-employee interaction mediated by technology. These features raise issues for performance monitoring, job design, work climate and different ways of management (Holman, 2005).

There are various attributes of the call centre environment which could have a positive or negative effect on the call centre agents depending on how these aspects are perceived. Thus, it is important to note that the manner in which CCOs perceive their work climate, performance monitoring, etc. will have an influence on their behaviour i.e. their commitment, intention to stay or leave, their job satisfaction, sence of well-being, and so forth. The next chapter examines employees’ perceptions of the call centre environment, the perceived fairness of performance monitoring, work climate and the impact of these perceptions on turnover intentions.

CHAPTER TWO: THE CALL CENTRE OPERATORS' PERCEPTIONS

Introduction

This chapter examines the call centre employees' perceptions of their work environment. Electronic performance monitoring and organisational climate in the call centre industry form the basis of this chapter. These two notions are key variables within various call centre researches and have mostly been associated with negative perceptions in call centres (Holman, 2002; 2005; Aiello and Kolb, 1995; Alder and Tompkins, 1997; Frenkel, *et al*, 1998; Fernie and Metcalfe, 1997). Thus, the fairness of electronic performance monitoring and the perceptions of the organisational climate have been chosen and are examined in detail in this chapter.

Electronic Performance Monitoring

When examining the way many call centres measure and manage their performance today it is easy to forget that the world has moved on from Taylorism and scientific management of mass production (Marr and Parry, 2004). Call centre performance measures are dominated by stopwatch, time-to-answer-a-call and call duration systems (Marr and Parry, 2004). This is made easy by call centre technologies or, as they are referred to in the literature, electronic performance monitoring. The CCO job is characterised by high levels of electronic performance monitoring (EPM) (Eason, 2002; Aiello and Kolb, 1995).

Aiello and Kolb (1995) note that in the United States individual performance monitoring is most prevalent and suggest that this form of EPM is the most invasive and stressful. Monitoring at a group level is perceived as less invasive and intrusive, yet still highly stressful, and maymay contribute to turnover intentions and actual high turnover rates in call centres (Aiello and Kolb, 1995; Alder and Tompkins, 1997;

Moorman and Wells, 2003). The purpose of this study is to examine the perceived fairness of EPM and its association to commitment, psychological climate and turnover intentions in the call centre industry. The concept of EPM is vital to the research in this report; thus, a detailed explanation of this notion, the EPM in the call centre environment, and perceived fairness of EPM form the basis of the next three sections of this chapter.

What is an Electronic Performance Monitoring System?

EPM is one of many technological innovations that employees face in today's workplace. Moorman and Wells (2003) suggest that EPM systems use electronic technologies to collect, store, analyse, or report the actions or performance of individuals on the job. In addition, EPM is said to involve the observation, examination, recording and feedback of employee work behaviour (Holman, 2002; 2003; 2005). The various methods of EPM include telephone call accounting, keystroke or computer time accounting, cards and beepers to monitor locations, computer file monitoring, screen sharing capabilities on networks, telephone call observation, and video camera observation (Alder and Tompkins, 1997).

These technological devices have the capability to record when a worker turns on or off a video display terminal (VDT), count key strokes by the second, time customer service transactions, track the number of operator errors, and provide managers with the ability to watch workers' every action without their knowledge (Alder and Tompkins, 1997). Thus, EPM systems provide managers with access to their employees' computer terminals and telephones, allowing them to determine at any moment during the day the pace at which employees are working, their degree of accuracy, log-in and log-off times and even the amount of time spent on breaks (Aiello and Kolb, 1995). In essence, electronic monitoring capabilities provide organisations with panoptic power (Alder and Tompkins, 1997).

Electronic Performance Monitoring in the Call Centre Industry

The use of EPM in organisations is extensive. Alder and Tompkins (1997) note that organisations currently monitor more than 26 million workers and within the customer service operations 98% of the work sites use EPM systems to constantly track workers' actions. This increased use of EPM has resulted in various debates amongst politicians, business groups and academics. Some researchers argue that EPM invades privacy, decreases job satisfaction and productivity, and increases stress (Aiello and Kolb, 1995; Alder and Tompkins, 1997; Moorman and Wells, 2003). Theorists have labelled the use of EPM 'digital Taylorism', where the continuous monitoring and emphasis on quantity results takes control away from the employee and places it with an unseen manager, thus creating a work climate filled with pressure that workers experience increased stress, greater dissatisfaction, a loss of valued privacy and lower morale (Moorman and Wells, 2003; Aiello & Kolb, 1995). Furthermore, Levi's (1995) research has found that EPM is linked to various health problems like stress, high tension, extreme anxiety, headaches, etc. These health problems in turn lead to increased levels of absenteeism, actual turnover and turnover intension (Levy, 1995).

However, other studies have found that monitoring has positive effects on productivity, customer and employee satisfaction, decreases subjectivity within the performance appraisal processes and improves morale amongst workers (Moorman and Wells, 2003; Alder and Tompkins, 1997; Griffith, 1993). In addition, because EPM can monitor performance remotely, it may be especially useful for telecommuting arrangements and for flexi-time work schedules (Moorman and Wells, 2003). These are probably some of the reasons that motivate a large number of call centres in South Africa to employ EPM in order to monitor and examine workers' performance and actions during the work day (Kazalarska, 2006; Miller and Fisher,

2005). It is thus vital in this study to examine how EPM is perceived within the South African call centre context and its effects on the CCOs' intentions to turnover, commitment and climate.

The call centre agent's job has been characterised by high levels of EPM and predetermined scripts (Eason, 2002; Aiello and Kolb, 1995). It is argued that, monitoring can be beneficial for the CCOs if feedback is provided to employees for developmental purposes, which in turn helps the CCOs to cope better with job demands (Holman, 2002; 2003; Alder and Tompkins, 1997). Furthermore, electronic monitoring at a work-group level is perceived as less invasive and intrusive than individual monitoring, still nevertheless highly stressful and a cause of negative work perceptions (Aiello and Kolb, 1995). In Sweden and Norway there is a law to limit the degree of EPM (Aiello and Kolb, 1995; Holman, 2002; 2003; 2005). This research examines whether there is a correlation between perceptions of fairness of EPM and turnover intentions in call centres in South Africa.

Perceived Fairness of Electronic Performance Monitoring

As stated above, that EPM may increase employee satisfaction because employees perceive that EPM results in more objective performance appraisals and improved performance feedback (Moorman and Wells, 2003). Such objectivity and exactness could contribute to a fairer perception of performance appraisals or EPM and an increased likelihood that supervisors could identify positive employee performance. Moorman and Wells (2003) and Alder and Tompkins (1997) believe that in order to increase the positive effects and decrease the negative effects of EPM (as discussed earlier), certain system characteristics, like employee control over the feedback delivery; the constructive nature of the feedback and the source of the feedback (i.e. a computer vs a supervisor) (Alder and Ambrose, as cited in Moorman and Wells, 2003). can influence whether employees perceive EPM as fair or unfair. Thus, perceptions of fairness may directly or indirectly

diminish the various concerns raised by the opponents of EPM (Moorman and Wells, 2003; Alder and Tompkins, 1997). In other words, management views EPM as a means to improve consistency in employee performance evaluation, yet employees question the fairness of the manner in which management utilises EPM systems to review workers' performance (Johnston and Cheng, 2002; Kidwell and Bennett, 1994). One of the aims of this research is to examine whether perceptions of fairness of EPM have an effect on intentions to turnover within the call centre industry.

The fairness of monitoring and feedback systems has been explored in various research efforts. Kidwell and Bennett (1994); Moorman and Wells (2003) and Johnston and Cheng (2002) suggest that performance appraisal or EPM feedback could be structured with elements of appropriate processes, such as adequate notice, fair hearing and assessments based upon objective evidence, considered by employees as procedurally fair. EPM could be accepted by employees if the monitoring practices are regarded as relevant to their work and procedurally just (Johnston and Cheng, 2002). Furthermore, Johnston and Cheng (2002) argue that the process can be considered fair only if it includes input from all affected parties, is employed consistently, is free of bias and errors, and is developed within an ethical framework of accountabilities. Alder and Ambrose (cited in Moorman and Wells, 2003) describe the fairness of feedback process in a similar manner. According to them the perceived fairness of feedback will be affected by three features, namely employee control over the timing of feedback, the constructive nature of such feedback and whether the source of the feedback is a computer or a supervisor. Alder and Ambrose's (2000) definition forms the framework or theory regarding the perceived fairness of EPM employed in this research report. Research reports by Kidwell and Bennett (1994) and Johnston and Cheng (2002) have found that a perceived lack of procedural fairness in monitoring can lead to negative employee reactions like withdrawal intentions, sabotage, resignation or other forms of decreased organisational citizenship.

In summary, this report argues that the perceived fairness of EPM may decrease turnover intentions with a concomitant positive effect on organisational climate and commitment. This study is designed to describe CCOs' perceptions of EPM in terms of fair or unfair use, employees' satisfaction with EPM systems application and EPM's perceptions in relation to turnover intentions in the call centre industry in South Africa. In order to describe more fully the perceptions of the call centre employees there is a need to examine the organisational climate perceptions, theory and organisational climate researches in the call centre industry. Thus, the next section of this chapter examines in detail the notion of organisational climate theory and organisational climate in the call centre industry.

Organisational Climate Theory

Another area of investigation within the interest of the original research reported in this research report is the notion of organisational climate, which also has implications for turnover intentions. Organisational climate theory and the concept of climate have been examined by many scholars. There are many definitions of climate, but only some of the major perspectives have received significant support. These perspectives include the cognitive schema approach and the shared perceptions approach (Anderson and West, 1998). With regards to the first approach climate was defined as individuals' cognitive representation of proximal environments expressed in terms of psychological meaning and significance to the individual (Anderson and West, 1998). Organisational climate refers to perceptions that members of the same organisation share certain fundamental elements of their organisation (Kangis and Williams, 2000). The second approach focuses on the notion of shared perceptions with regards to the concept of organisational climate. These perceptions represent cognitive interpretations of the organisational context or situation and summarise an

individual's description of their work experiences (Reichers and Scneider, 1990). Reichers and Scneider (1990) defined climate as "the shared perception of the way things are around here" (p.22).

Moran and Volkwein (1992) define climate as relatively enduring characteristics of an organisation which distinguish it from other organisations and embodies members' collective perceptions about their organisation with regards dimensions such as autonomy, trust, cohesiveness, support, recognition, innovation, fairness, a phenomenon produced by member interaction, serves as a basis for interpreting the situation; reflects the prevalent norms and attitudes of the organisation's culture, and acts as a source of influence for shaping behaviour. The focus of this research will be on organisational climate not culture.As such, it is important to draw a distinction between organisational climate and culture. Kangis and Williams (2000) suggest that climate is much more in the foreground of organisational members' perception, whereas culture is more in the background and defined by beliefs and values of the organisation. Thus, the notion of climate as applied to the call centre environment is the primary focus of of investigation in this report. The next section examines key researches with regards to the employees' perceptions of the organisational climate in call centres.

Organisational Climate in the Call Centre Industry

For the purpose of the current research it is more appropriate to examine the organisational climate rather than culture, since the purpose of this paper is to describe how the employees perceived the organisational climate and their attitudes towards the organisation's structure, responsibility, reward, risk, warmth, support, standards, conflict and identity concepts. Thus, this research will examine organisational climate in the call centre industry in terms of Litwin and Stringer's (1968) theory, the notions of **structure** of work, degree of

employee **responsibility, warmth** amongst managers and employees, **rewards** available for performance and managerial **support** toward employees. The workers' perceptions of the work environment have long been recognised as a potent influence on employees' cognition, attitudes, behaviour and intentions to turnover (Kangis and Williams, 2000). The technology in call centres offer many opportunities, bu pay little attention to the work climate and have implications for turnover in these centres.

The Structure sub-scale measures the feeling workers have about the constraints in their work situation, such as the number of rules, regulations and procedures in place (Litwin and Stringer, 1978). The Responsibility sub-scale measures the degree to which employees accept responsibility for the work they do characterised by a sense of "being your own boss" and autonomy (Litwin and Stringer, 1978). The Reward sub-scales measure the extent to which performance is acknowledged by rewards in the organisation, a sense of being rewarded for excellence, and the focus on reward, on the one hand, versus criticism and punishment, on the other (Litwin and Stringer, 1978). The Warmth sub-scale measures the degree of warmth in the organisation and in relationships among workers, and a sense of camaraderie (Litwin and Stringer, 1978). Finally, the Support sub-scale measures the extent to which management supports employees and the degree of helpfulness in the organisation (Litwin and Stringer, 1978).

The work climate in call centres has been described by Frenkel, *et al*, (1998), whose research suggests that when examining the call centre environment two contrasting images of the organisational climate have emerged. The first image is a positive one of call centres, informed by the concept of the semi-professional, 'empowered' worker (Holman, 2005; Parker, 2002; Frenkel, *et al*, 1998). In the 'empowered' image of a semi-professional CCO, call centre agents have high degree of control and responsibility over how the job is executed and are required to combine an extensive product or service knowledge as well as customer service

skills (Holman, 2005). In addition, the reward system is fairly and clearly defined and based on performance. With regards to the positive, empowered image of the call centre climate there are a variety of calls and tasks in which problems are handled by the CCO. In addition, calls are longer and generally unscripted (Holman, 2002; 2005).

At the same time, empowered call centres' jobs are largely characterised by high degrees of task interdependence, supportive and warm work environment. Thus, it is argued that the semi-professional status of the CCOs provides favourable work relations, consisting of friendly, physical working conditions, challenging and stimulating jobs, teamwork and participation in task-related decision-making (Holman, 2005; Frenkel, *et al*, 1998). Research on service workers suggests that empowered workers are likely to be more productive than their more "routinised" co-workers with the clear implication that management should choose this form of work organisation (Holman, 2005; Parker, 2002; Frenkel, et al, 1998). Both call centre images of the work climate are central to the way CCOs perceive their jobs and work climate and subsequently influence their work life experience, commitment and intention to leave.

In contrast, the second image of the call centre has been described by various theorists as an electronic sweatshop or panoptic wired cage (Frenkel, *et al*, 1998; Holman, 2005; Fernie and Metcalfe, 1997). According to this perspective of call centres, employees are connected to information technology that automatically allocates work, facilitates its completion and constantly monitors CCOs performance (Frenkel, *et al*, 1998; Holman, 2002; 2003; 2005). ,Work is performed in an isolated manner, but under the constant control of supervisors, who are responsible for interpreting the EPM information. The CCO's job is seen as "deskilled" and repetitive (Frenkel, *et al*, 1998). Omar (2001), Fernie and Metcalfe, (1997) and Wallace and Eagleson (2004) have reported that the more Tayloristic call centres is characterised by

extreme control and surveillance by management and that the structures of control are pervasive to the point of eliminating any form of workers' initiative or agency in call centres. The total control within call centres implies that the feeling of responsibility of one's own work is low, as everything is checked and monitored at all times. Rewards are associated with quantity and targets rather than quality, i.e. the content of calls and the ways in which the employee interacts with the customer (Bain, Watson, Mulvey, Taylor and Gall, 2002). The focus on scientific management and quantitative rather than qualitative targets create a toxic work environment and climate in the call centre industry (Miller and Fisher, 2005).

All of the above findings within the Fernie and Metcalfe (1997), Bain, *et al*, (2002), Holman (2002; 2003; 2005), and Omar (2001) research efforts suggest that, organisational climate has been associated with highly negative perceptions of the call centre agents. Thus, Miller and Fisher (2005) and Fernie and Metcalfe (1997) have described the call centre variously as an electronic sweatshop of the digital era, an electronic panopticon, a battery hens, a dark, satanic mills, and a tyranny of the assembly line. These notions have been proposed because of the high levels of technology, surveillance and control in the call centre context, which suggest that absolute employee-control is simplified (Fernie and Metcalfe, 1997). In their research Miller and Fisher (2005) describe the call centre management philosophy as driven by Taylorist concerns of cost-cutting and efficiency and the call centre employees' job design practices as driven by the need to simplify, monitor and control. Wallace and Eagleson's study (2004) have found that CCOs have very limited contact with the supervisor, with technology acting not only as the controlling mechanism, but also providing leadership to subordinates. Yet, this leadership does not include the strategic functions of leadership and it certainly could not provide a supportive and warm climate within the call centre. All of the above explanations of the call centre management, job description, and so forth imply that the work climate has not a favourable or positive effect on workers. This could be one of the various contributors to the high

rates of turnover intention and actual turnover in call centres. Thus, it is a logical step for the current research to examine the relationship between the organisational climate and turnover intentions in the South African call centres.

In summary, the environment and climate in call centres has been described by certain studies, as characterised by high levels of EPM, low quality performance, poor job attitudes, and toxic and highly monotonous tasks (Aiello and Kolb, 1995; Alder and Tompkins, 1997; Moorman and Wells, 2003; Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002). Theorists have labelled the use of EPM in call centres as 'digital Taylorism', where the continuous monitoring and emphasis on quantity takes control away from the employee and substitutes it with an unseen manager, thus creating a work climate filled with pressure where workers experience increased stress, greater dissatisfaction, a loss of valued privacy and diminished morale (Moorman and Wells, 2003; Aiello & Kolb, 1995). The current research utilises Litwin and Stringer's (1968) theory in order to examine organisational climate. The modern call centre is the 'sweat shop' of the digital era or electronic panopticon, where electronic surveillance makes total control easy. These images and the fairness of EPM perceptions have implications for the prevailing work climate in call centres, which in turn have influence over the intention to turnover of CCOs, a concept which is to be fully examined in the next chapter.

CHAPTER THREE: ATTITUDES AND BEHAVIOURS IN CALL CENTRES

Introduction

This chapter explores attitudes and behaviours of the employees within the call centre industry., It also examines organisational commitment and turnover intention. .Definitions of these two notions will be considered. Organisational commitment and turnover intentions are also applied to the call centre work and environment, since call centres are the focus of investigation of the present research.

Organisational Commitment

If an organisation aims to deliver services successfully, it is crucial to recruit and retain a workforce with a sense of commitment to organisational goals and values. Organisational commitment provides a basis for understanding the development of linkages between individuals and organisations (Cuskelly and Boag, 2001). The concept of organisational commitment originated from various organisational and sociological theories based on the work of Kelman (1958), Etzioni (1975), and Kanter (1968) that attempt to explain involvement in social organizations (cited in Cuskelly and Boag, 2001). In work organisations, understanding attitudes such as organisational commitment, job satisfaction and job involvement, is important because they are often influential in key aspects of organisational behaviour, such as task performance, absenteeism, and turnover (Cohen, 2000; Little and Dean, 2006; Deery and Walsh, 2002; Robbins, Odendaal and Roodt, 2003; Schultz and Schultz, 2006; Clegg and Wall, 1981; Udo, Guimaraes and Igbaria, 1997).

Employee commitment is defined in terms of employees' beliefs in the goals and values of the organisation, their willingness to exert effort and their intention to maintain membership of the organisation (Little and

Dean, 2006). Clegg and Wall (1981);Cook and Wall (1980) and Warr, Cook and Wall (1979) define organisational commitment as feelings of attachment to the goals and values of the organisation, one's role in relation to this, and attachment to the organisation for its own sake rather than for its strictly instrumental value. From the above definitions it becomes evident that commitment incorporates both employees' feelings about the organisation and their desire to remain in it. It is thus obvious that organisational commitment is strongly related to turnover/ withdrawal intentions and is a reliable predictor of employee turnover (Little and Dean, 2006; Deery and Walsh, 2002; Robbins, Odendaal and Roodt, 2003; Schultz and Schultz, 2006; Elangovan, 2001). This means that employee commitment is important in the call centre context, since it reflects and is related to turnover intentions, the focus of the present research.

Types of Organisational Commitment

The use of the term 'commitment' to describe very different constructs has led to considerable confusion in the literature. Many researchers (e.g.; Maxwell and Steele, 2003; Elangovan, 2001; Buchanan, 1975) have defined organisational commitment, identifying the key characteristics considered to be demonstrated by committed individuals, yet there are prominent differences between the various conceptualisations of commitment. The following section presents the main approaches to defining employee commitment.

Ferres, Travaglione and Firns (2003); Schultz and Schultz (2006) and Shepherd and Mathews (2000) highlight Allen and Meyer's (1990, as cited in Shepherd and Mathews (2000) organisational commitment theory, which suggests that there are three types of employee/ organisational commitment: attitudinal or affective, normative and behavioural or continuance commitment. Employees with a strong, affective commitment remain at an organisation because they *want to*, those with strong continuance commitment remain because they *need to* and those with strong normative commitment remain because they feel they

ought to do so (Ferres, et al, 2003). Thus, in behavioural commitment the employee is bound to the organisation only by peripheral factors (e.g. pension plans and seniority), which would not continue if the employee quit (Shepherd and Mathews, 2000; Schultz and Schultz, 2006). Normative commitment entails a sense of obligation to remain with the employer, a feeling that develops when the employees receive benefits like tuition reimbursement or specific skill training (Shepherd and Mathews, 2000; Schultz and Schultz, 2006). Thus, normative commitment is defined as the "totality of internalised normative pressures to act in a way that meets organisational goals and interests and suggests that individuals exhibit behaviours solely because they believe this is the right and moral way in which to behave" (Shepherd and Mathews, 2000, p.559).

Attitudinal or affective commitment is what Buchanan (1975), Clegg and Wall (1981), Cook and Wall (1980), Warr, Cook and Wall (1979), and Cuskelly and Boag (2001) define as organisational commitment. Feelings of attachment to the goals and values of the organisation, wanting to exert considerable effort on behalf of the organisation in order for it to achieve its goal, and attachment to the organisation for its own sake rather than for its strictly instrumental value. For the purpose of this research the concept of organisational commitment is examined in terms of Cook and Wall's (1980) theory, in terms of attitudinal or affective commitment only. Cook and Wall (1980); Clegg and Wall (1981) and Warr, Cook and Wall (1979) suggest that organisational commitment is comprised of **organisational identification, organisational involvement** and **organisational loyalty** (Cook and Wall, 1980). The organisational identification notion refers to the pride taken in the organisation and the internalisation of its goals and values (Shepherd and Mathews, 2000). The organisational involvement implies the psychological absorption in the activities of one's role for the good of the employing organisation (Shepherd and Mathews, 2000). Later, the concept of organisational loyalty will be examined in relation to one's affection

for, and attachment to the organisation as well as one's sense of belonging manifested as a wish to stay (Shepherd and Mathews, 2000). This leads the exploration of the notion of commitment to the next logical step, which is to examine organisational commitment within the call centre industry.

Organisational Commitment and the Call Centre Industry

As stated earlier, call centres are a vital part of today's business world, i.e. functions and operations. However, research studies conducted in the banking call centres by Owen (2002) and Malhotra and Mukherjee (2004) have found that there is lack of organisation commitment and loyalty. Furthermore, within the research conducted by Owen (2002), it was found that most CCOs want to leave their jobs, where 50% of call centre agents are high risk or have high intention to turnover. Lack of employee commitment within the call centre industry could have a devastating impact on the business and profit of the business, since CCOs are the interface between the customers and the the organisation. Thus, CCOs represent the company and directly influence the service quality perceptions of the customer (Malhotra and Mukherjee, 2004). Thus, if the call centre agents are not committed to their jobs, this will affect their attitudes and manner in which they conduct their business. This means that it can be inferred that uncommitted CCOs may not be interested if the customer is satisfied, and would content themselves with doing the bare minimum. Practically, this means that they will confine themselves to answering queries, without necessarily solving problems for customers. Thus, in their research Malhotra and Mukherjee (2004) found that, it is the behaviour of a committed call centre agent that will largely determine service quality perceptions and customer satisfaction on the external front (Malhotra and Mukherjee, 2004).

Nevertheless, research does indicate that a number of organisational factors may influence the employees' organisational commitment. (Stanton, 2000; Owen, 2002; Little and Dean, 2006; Udo et al, 1997; Lin and

Hsieh, 2002). In particular, we will examine how the variables relevant to this study namely perceived fairness of organisational procedures or EPM (Stanton, 2000; Owen, 2002); organisational climate (Little and Dean, 2006) and management or supervisory support (Schultz and Schultz, 2006)may affect organisational commitment. It has been indicated earlier that call centres are characterised by stress, dissatisfaction, poor work climate, low levels of job autonomy or control, low skill variety and the absence of managerial strategies designed to achieve high commitment from staff (Holman, 2002; 2003; 2005; Frenkel, *et al*, 1998; Deery and Walsh, 2001). All these negative attributes of the call centre climate may affect the call centre agents' commitment. Studies done by Stewart, Bing, Gruys and Helford (2007) and Little and Dean (2006) have found a strong association between organisational climate and employee commitment. This suggests that the CCOs' commitment will also be poor as the climate is poor or dissatisfactory.

Not surprisingly, the findings from previous research support a negative correlation between emplo'yee organisational commitment within call centres and employee intention to turnover, absenteeism, performance and tardiness (Stewart, Bing, Gruys and Helford, 2007; Cohen, 2000; Udo et al, 1997; Wallace and Eagleson, 2004; Schultz and Schultz, 2006; Carmeli and Gefen, 2005; Maxwell and Steele, 2003). Yet, it has been evident that the call centre employees' commitment is somewhat low as the environment, job design and well-being are somewhat low and unsatisfactory (Holman, 2002; 2005). This implies that the low commitment would increase the level of intentions to turnover or actual turnover, which is the main question of this research report. This leads to the examination of the next area of investigation in the original research reported in this research report, namely turnover intention in the call centre industry.

Turnover/ Withdrawal Intentions

Retention and productivity levels of a workforce remain critical success factors if organisations are to prosper in today's competitive business environment (Riley, 2006). Workforce turnover is well-recognised as an issue of vitall importance to managers. Lack of employee continuity and organisational stability, the high costs involved in the selection and training of new staff and organisational productivity are just some of the challenges that arise as a consequence of turnover (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004; Siong, Mellor, Moore and Firth, 2006).

For the purpose of the original study reported in this research report, the concept of withdrawal/turnover intention is examined in terms of the thought of quitting and the intention to search for another job elsewhere (Carmeli and Gefen, 2005; Chiu and Francesco, 2003). Turnover intentions can lead to, and are good predictors of, actual turnover since they are employees' evaluations related to the decision to leave one's job. Workforce turnover and intentions to turnover are well-recognised problems to organisations, stakeholders and managers. In cases of high turnover, organisations are faced with lack of employee continuity, low staff commitment, organisational instability, and high costs involved in selection and training of new staff to ensure organisational productivity and revenue. These are just a few of the challenges that arise as a consequence of turnover (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004; Siong, Mellor, Moore and Firth, 2006). Therefore, it is crucial for research and organisational psychologists to identify the contributing factors associated with employee intentions to turnover and actual turnover. There is a close link between turnover intentions and actual turnover behaviour (Carmeli and Gefen, 2005; Cohen, 1999; Chiu and Francesco, 2003; Riley, 2006; Shaw, Delery, Jenkins and Gupta, 1998), thus it seems as a logical step to examine the concept of turnover

(i.e. voluntary and involuntary turnover), South African trends within the market context and its consequences for call centre organisations.

Voluntary and Involuntary Employee Turnover

Employees may leave an organisation either voluntarily or involuntarily. Thus, the differentiation between voluntary and involuntary turnover has to be examined. Literature suggests that voluntary turnover, or a quit, reflects an employee's decision to leave an organisation. Involuntary turnover, or a discharge, reflects an employer's decision/ thought to terminate the employment relationship (Riley, 2006; Shaw, et al, 1998). Employees may voluntary leave an organisation or a job position for various reasons; to escape negative work climate, to seek different career goals, or to pursue opportunities that are more financially attractive. In case of involuntary turnover, the organisation may terminate the relationship with an employee based on incompatibilities or a mismatch between the employee's capabilities and the employer's requirements (Swanepoel, Erasmus, Van Wyk, and Schenk, 2003). Involuntary turnover may also include death, mandatory retirements and ill health (Riley, 2006). However, for the purpose of this study, turnover intention would be examined in terms of, or defined as an employee's decision/thought to leave an organisation voluntarily. Therefore, the next reasonable step is to identify some of the contributory factors of voluntary turnover.

Research within the area of turnover and individuals' behaviour suggests that voluntary turnover is affected by two primary factors: the attractiveness of a current job and the availability of alternatives (Shaw, et al, 1998). Furthermore, research indicates that pay levels and investments in the human capital of an organisation can reduce voluntary turnover (Shaw, et al, 1998). Arthur (1994, as cited in Shaw, et al, 1998) suggests that commitment-enhancing Human Resource Management (HRM) systems also reduce turnover.

Thus, it would seem that the underlying trendwithin this body of research is the idea that employees tend to remain with an organisation when overall self-interest (i.e. financial and psychological) is satisfied. (Shaw, et al, 1998). This means that in cases where the exchange is less favourable, r the employee is most likely to leave the organisation once alternative employment options are available (Tsui, Pearce, Porter and Tripoli, 1997).

Tsui et al's (1997) study further argues that incentives and investments in employees increase employees' expected outcomes, making a job more attractive (Tsui et al, 1997; Shaw, et al, 1998). On the other hand, employers' expectations increase employees' expected contributions, thus decreasing the attractiveness of a job (Tsui et al, 1997; Shaw, et al, 1998). Simply stated, incentives and investments reduce turnover rates, whereas expected contributions increase turnover rates. In order to provide a comprehensive framework of voluntary turnover in terms of attractiveness, alternatives, pay and benefits, it is important to take into account the context within which the original/current study has been conducted. For this purpose, the South African context of job alternatives, availability and incentives (wages and benefits) will be examined in the next paragraphs. Furthermore, the attractiveness of the call centre operator's job within the context of the original research reportalso needs to be considered for a clearer understanding of the issue of turnover intentions or actual turnover in the South African call centre industry.

The South African Market Context

Within the South African market place, it could be argued that job alternatives or availability is somewhat low. The South African workplace context is characterised by an extremely high unemployment rate (40%) that hasrisen steadily in the preceding years (Kingdon and Knight, 2006; Kingdon and Knight, 2001). Unemployment is a topic of serious concern because of its effects on economic welfare, production, erosion

of human capital, social exclusion, crime and social instability (Kingdon and Knight, 2006; Kingdon and Knight, 2001). The predominantly low wages within the South African market place mayfurther aggravate the market condition of high unemployment. South African CCOs' salaries per hour ($3.50 to $5.00) are low compared to other countries, like Spain, Portugal, United States, Canada, New Zealand, Ireland, and Puerto Rico (ranging from $5.00 to $14.00) (Sharma, 2007). Because research indicates that pay and benefits in the human capital of an organisation reduce voluntary turnover (Shaw, et al, 1998), this may help explainmay the high levels of turnover intentions and actual turnover.

Nevertheless, the South African call centre industry creates employment opportunities, provides skills training and ensures equitable and just distribution of benefits from the industry's growth and development (Sharma, 2007). Thus, it can be arguedthat to have a job that pays around the minimum wage in an economy that is baset with a 40% unemployment rate (Kingdon and Knight, 2006; Kingdon and Knight, 2001) could be seen as quite an attractive job opportunity. Furthermore, the CCOs' training is a benefit/asset to employees since South Africa faces a skilled labour shortage and high levels of illiteracy (Altman, 2006). Erasmus and Van Dyk (2001) argue that approximately 30% of the country's economically active population is illiterate (with standard three or lower qualification, or without any schooling).

It can thus be arguedthe CCO's job within the South African context is seen as quite an attractive opportunity. However, low wages, a toxic work climate, highly stressful performance monitoring, total control and the demand of interpersonal skills and emotional labour could explain the high level of turnover and turnover intentions in the call centres. Yet, perhaps due to the high level of unemployment, the CCOs in South African call centres may not intend to quit their jobs as quickly or as readily as their counter parts in other more advanced countries or countries with lower unemployment rates and higher standards of living.

Thus, even if the call centre climate is stressful with unsatisfactory rewards, unfair performance monitoring and low commitment, CCOs may not leave their jobs or anticipate leaving their jobs due to economic factors. However, the purpose of the original research reported in this study is to examine and evaluate the situation in the South African call centre industry in terms of turnover intention, commitment, climate, and fairness of EPM. The following section will thus examine turnover intentions within call centres, consequences of turnover, and contributing factors to turnover intention.

Turnover/ Withdrawal Intentions and the Call Centre Industry

In the call centre industry one of the most pressing issues facing management is the high rate of employee turnover. A recent industry study of call centres in Australia reported full-time staff turnover (resignations) as being 26% per annum and part-time staff turnover as 40% per annum (Wallace and Eagleson, 2004). South Africa has a turnover rate of about 30% a year (Lewis, 2001). These figures, on average, constitute an increase of 5% from the previous year. Academic researches in the call centre industry in different countries have also reported similarly high levels of turnover. The costs to an organisation to replace a single call centre agent is about $15,000 (Wallace and Eagleson, 2004). Thus, identifying some of the causes of employee turnover intentions in call centres has become a priority. Given the high levels of front-line attrition in call centres it is of interest to understand some of the aspects of the workplace which influence CCO turnover.

Various studies have attempted to identify characteristics of the call centre environment that contribute to high levels of employee turnover. In the main, researches examining turnover have focused on issues of pay and career (Taylor and Bain, 1999) and satisfaction and commitment (Deery and Walsh, 2001; Frenkel, et al, 1998) as contributors to turnover. Furthermore, the environment in call centres has been described by

certain studies as toxic with the work being described as low quality highly monotonous, highly-routined, repetitive, and demanding interpersonal and technical skills (Siong, Mellor, Moore and Firth, 2006; Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002). Many of the management functions in call centres are now provided through computer technology (EPM feedback), thus Wallace and Eagleson (2004) suggest that another contributing factor to turnover could be the invasive, unfair and constant use of computer technology or EPM.

In addition, Wallace and Eagleson (2004) argue that these 'careerless' call centre jobs with low pay rates and low level of skills are associated with high turnover rates. Other studies have associated the high rates of turnover in call centres with employee stress, dissatisfaction and the absence of managerial strategies designed to achieve highly committed staff (Siong, et al, 2006; Frenkel, et al, 1998). These may be some of the factors which could be attributed to the high levels of staff turnover intentions and actual turnover. However, for the purpose of the original study reported in this research report only employee commitment, call centre climate and the perceived fairness of EPM will be examined with regards to intentions to turnover. Furthermore, various research suggests that individual differences , such as personality characteristics, have a negative effect on the call centre environment and thus moderate the above-mentioned relationship and its effects to turnover intentions (Miller and Fisher, 2005; Chiu and Francesco, 2003). The next chapter thus aims to investigate the hardiness personality characteristic as a moderator variable.

CHAPTER FOUR: INDIVIDUAL DIFFERENCES-PERSONALITY

Introduction

The environment within call centres has been described as highly stressful,often having a negative impact on individual well-being (Holman, 2002; 2003; 2005). Research done in the USA, UK and Europe have found that, when comparing many occupations, call centre operators' jobs were found to be one of the most stressful jobs (Johnson, Cooper and Cartwrigh, Donald, et al, 2005). In addition, Miller and Fisher (2005) refer to call centres as 'nerve centres' with regards to the emotional labour and client-centred operations. Holman (2002; 2003; 2005) and Bain, et al, (2002) have found a strong relationship between CCO work life experiences and high levels of stress, negative impact on well-being (i.e. anxiety and depression) and low levels of job satisfaction. These associations were attributed to job design, organisational climate, electronic performance monitoring, HR practices and team-leader support.

But what if some people can tolerate or are not negatively impacted by the stressful work environment in the call centre industry? It is argued that individual differences can act as moderators that help some people respond to a stressful environment positively, while others respond negatively (Tjiong, 2000). Kobasa (1979) theorised that people who experience high degrees of stress without illness have a hardy personality structure characterising them differently from people who become sick.

This chapter examines the hardiness personality and its effect within the call centre industry. The notion of hardiness and its different dimensions are explained in detail. Furthermore, this chapter explores the role of hardiness as a moderator within the relationship of organisational climate, organisational commitment, perceived fairness of electronic performance monitoring and turnover intention within the call centre

industry. Since the environment and climate within call centres are described as highly stressful, it seems a logical step to examine the relationship between hardy people (or hardiness) and stress. This is the logic in including hardiness as a moderator within the original research reported in this research report.

Personality Characteristics

The notion of personality has intrigued theorists for quite some time. There are many questions with regards to this notion that are still being debated. For example, certain personality theorists argue that the concept of personality is not a clear cut concept, because human beings are unique and tend not to act/behave consistently in different situations (Pervin, 1985; Carson, 1989). Robbins, Odendaal and Roodt (2003) suggest that personality is the sum total of ways in which an individual reacts to and interacts with others.

Individual differences or personality variables/traits are often described as the moderators that help some people respond to a stressor positively, while others respond negatively (Tjiong, 2000). There are various personality characteristics that may explain individual differences in the manner in which people cope with stress or negatively perceived life events. Some of theseinclude locus of control, self-efficacy, self-esteem and hardiness (Miller and Fisher, 2005; Tjiong, 2000; Kosaka, 1996). It can thus be argued that personality characteristics, such as hardiness, self-esteem, self efficacy and positive/ negative affectivity have the ability to moderate or diminish the negative effects of the call centre environment for the CCOs (Miller and Fisher, 2005). It has also been argued that dispositional traits affect employees' turnover intentions (Chiu and Francesco, 2003).The original study reported in this research report aims to establish wtherther a specific personality characteristic, namely hardiness, moderates the relationship between organisational climate, the perceived fairness of EPM, organisational commitment and turnover intentions as well as its effects on turnover intentions within the call centre environment in South Africa.

Hardiness

Hardiness is a construct developed by Kobasa (1979). Theoretically, hardiness develops in early childhood and emerges as a result of rewarding and rich life experiences (Kobasa, 1979). The hardiness concept represents a collection of various attributes, beliefs and behavioural tendencies that encompass three dimensions; namely challenge, commitment and control (Kobasa, 1979; Tjiong, 2000). These three coping attitudes define the hardy personality (Kobasa, 1979; Kobasa, Maddi and Kahn, 1982; Schultz and Schultz, 2006). *Control* means facing reality and taking charge of the stressful situation. In addition, control could also imply the ability to feel and act as if one is influential as opposed to helpless (Kobasa, 1979; Tjiong, 2000). Hardy people believe they can choose how they handle situations and have a sense of autonomy and influence on their future (Kobasa, 1979; Kobasa, et al, 1982). Individuals that are highly stressed but healthy posses decision control (the ability to choose amongst various courses of action to handle a situation),; cognitive control (the ability to appraise and incorporate stressful events into a life plan and deactivate their effect), and motivation to achieve across all situations (Kobasa, 1979).

Commitment refers to assigned meaning and purpose to self, others and work (Kobasa, 1979; Kobasa, et al, 1982). People who make those commitments have a sense of purpose and they know they can call on their relationships in times of stress. Furthermore, Kobasa (1979) and Tjiong (2000) argue that commitment is the inclination to involve oneself in the experience, rather than running away from the problem. Hardy managers exhibit a sense of commitment to various aspects of their life i.e. social, work, interpersonal, family and self (Kobasa, 1979; Kobasa, Maddi and Kahn, 1982). In addition, change for such hardy individuals is seen as a challenge which provides opportunities for growth rather than threat for security (Kobasa, 1979; Tjiong, 2000).

Challenge refers to an enthusiasm and excitement for life which is perceived as opportunities for growth (Kobasa, 1979; Kobasa, et al, 1982). Hardy people seek out novelty and challenge as opposed to familiarity and security (Kobasa, 1979; Tjiong, 2000). They feel challenged by stressful situations and have high tolerance for ambiguity (Kobasa, Maddi and Kahn, 1982).

During the last 20 years, the personality construct hardiness has emerged as an important variable in moderating the relationship or offering resistance toward the effects of stress (Judkins and Furlow, 2006). Because the call centre environment is characterised by high levels of stress, it is necessary to examine the relationship between hardiness, well-being and stress.

Hardiness, Well-being and Stress

Kobasa (1979) theorised that people who experience high degrees of stress without illness have a personality structure characterising them differently from people who become sick. Kobasa (1979) created the term 'hardiness' in order to describe these people. Furthermore, hardiness studies have found that individuals possessing hardiness traits do not give up easily under pressure, become ill less often, and have the ability to behave in an adaptive manner when stress is experienced (Kobasa, 1979; Kobasa, et al, 1982; Judkins and Furlow, 2006; Tartasky, 1993). The hardiness personality characteristic protects such hardy individuals in two ways: it alters perceptions of stress and mobilises effective coping strategies (Judkins and Furlow, 2006).

Hardy individuals are said to posess beliefs that stressors are manageable and that they can influence what is happening around them with a willingness to act on that belief (Judkins and Furlow, 2006). This refers to

having a sense of control about an event that happened within one's life. In addition, employees with a high personal locus of control feel that they can influence their own destiny. Hardy employees believe events occur as a result of personal actions, not those of co-workers, management or the organisation at large (Judkins and Furlow, 2006). Such hardy employees feel more in control and they are not overwhelmed by occurring events (Kobasa, 1979; Kobasa, et al, 1982). Committed people have a belief system that minimises the perceived threat of any given stressful life event (Kobasa, 1979). Hardy individuals engage others in problem solving and make the workplace a better, more nurturing environment for employees (Kobasa, 1979; Kobasa, et al, 1982).

It follows that hardy employees tend to view changes, challenges, stress/pressures and ambiguitiesthough sometimes painful, as opportunities to learn and grow from personally (Khoshaba & Maddi, 1999; Kobasa, 1979; Tjiong, 2000). Highly hardy employees view stress in a positive way and are able to develop efficient coping strategies. Hardy individuals perceive themselves as being able to effect changes rather than being affected by changes (Judkins and Furlow, 2006). It now becomes necessary to examine hardiness in the call centre environment. Thus, the next part of this chapter examines the role of hardiness as a moderator of the negative effects or stressors in call centres.

Hardiness and the Call Centre Industry

The work in the call centre industry is very stressful and often having a negative impact on individual well-being (Holman, 2002; 2003; 2005). When comparing across various job types, the call centre agent's job is considered one of the most stressful (Johnson, Cooper and Cartwrigh, Donald, et al, 2005). Miller and Fisher (2005) have explained the call centre industry in South Africa and described call centres in South Africa as 'nerve centres' due to the emotional labour and client-centred operations which involve high

amounts of stress for the operator working in them. In addition, research done by Holman (2002; 2003; 2005) and Bain, et al (2002) found a strong relationship between the call centre agents' jobs and high levels of stress, negative impact on well-being (i.e. anxiety and depression) and low levels of job satisfaction. These associations were attributed to job design, organisational climate, high levels of electronic performance monitoring, Human Resource practices and team-leader support.

Nevertheless, there are certain employees within these call centres that can endure high levels of stress and are not negatively impacted by it. Such employees may be said to posses the characteristics of a hardy individual. The original research reported in this research report aims to examine the moderating effect of hardiness on the relationship between CCOs turnover intentions and organisational commitment, organisational climate, and perceived fairness of EPM.

It is argued that individual differences can act as moderators that help some people respond to a stressful environment positively, while others respond negatively (Tjiong, 2000). In addition, Kobasa (1979) theorised that people who experience high degrees of stress without illness have a hardy personality structure characterising them differently from people who become sick. Schultz and Schultz (2006) argue that hardy people believe they can control the events in their lives and thus may be more resistant to stress. Furthermore, such people are deeply committed to their work and other activities of interest. Investigators have found that hardy individuals tend to perceive positive events as relatively important and negative events as relatively unimportant (Kobasa, 1979). Individuals high in hardiness experience less anxiety and worry than individuals low in hardiness. Schultz and Schultz (2006) and Williams, Wiebe and Smith (1992) add that highly hardy people utilise more problem-focused techniques and a variety of coping techniques and support seeking processes when dealing with stress, in contrast to low hardy people who tend to use

avoidance and wishful thinking. Hardiness seems to be associated with successful coping strategies to stress or other negative environmental influences. Therefore, the above findings make hardiness a useful measure, especially in the call centre industry where stress is highly prevalent amongst call centre agents (Holman, 2002; 2003; 2005).

The original research reported in this research report examines the level of hardiness (low vs high) of call centre operators in connection to the turnover intentions and organisational commitment, organisational climate and perceived fairness of electronic performance monitoring. To be more specific, the purpose of the original research reported in part two of this research report is to examine the moderating effect of this personality characteristic on the relationship between organisational commitment, organisational climate and perceived fairness of electronic performance monitoring and turnover intentions in the call centre industry.

To summarise, all of the concepts examined in the theoretical background of this research report have implications for CCO intention to turnover. The above provides evidence that the retention and productivity levels of call centre agents are critical ingredients if organisations are to succeed in today's competitive business environment. Nevertheless, the high turnover intentions within call centres are evident and have been associated with the negative effects on CCOs' work life experience. Miller and Fisher (2005) have explained call centre as 'nerve centres' with regards to the emotional labour and client-centred operations. This research report examines call centre agents' turnover intention in association with their organisational climate, organisational commitment, perceived fairness of EPM and the moderating effect of hardiness.

CHAPTER FIVE: RATIONALE AND PROCEDURE

Rationale and Aim

This research is relevant on a number of levels. Firstly, call centres are one of the fastest growing industries in South Africa. Call centres are beneficial to organisations since they cut costs and increase profit. However, Little and Dean (2006) and Owen (2002) argue that in tandem with recent growth of the call centre industry is the negative perception of the way it is managed and the high level of turnover. The environment in call centres has been described by certain studies as toxic with the work being described as low quality, highly monotonous, highly-routined, repetitive, and demanding interpersonal and technical skills (Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002). Some of the above characteristics outlined in Workman's and Bommer's (2004) and Holman's (2005) research may explain why employees' commitment levels are low and the work climate is poor in the call centre industry. Furthermore, the high levels of call monitoring may contributing to the increasing high levels of stress and turnover intentions, as well as actual turnover in the call centre industry (Little and Dean, 2006; Holdsworth and Cartwright, 2003). What is important is that this research project examines the situation in South Africa in terms of turnover intentions and the call centre agents' attitudes and perception about their work climate and commitment to the job as well as to the fairness of the use of performance monitoring systems within the South African call centre environment.

Workforce turnover is well-recognised as an issue of critical importance to managers. Lack of employee continuity and organisational stability, the high costs involved in the selection and training of new staff and organisational productivity are some of the challenges that arise as a consequence of turnover (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004;

Siong, Mellor, Moore and Firth, 2006). A recent industry study of call centres in Australia reported full-time staff turnover (resignations) at 26% per annum and part-time staff turnover at 40% per annum (Wallace and Eagleson, 2004). In 2001, Lewis reported that in South Africa the turnover rate in call centres was 30% a year due to the high levels of stress, monitoring and target driven climate. Another study by Owen in 2002 found that 50% of call centre agents indicated a low intention to stay with the organisation in the short to medium term. Furthermore, Wallace and Eagleson's (2004) research in Australian call centres found that the cost to an organisation to replace a single call centre agent is about $15,000. In Owen's (2002) research report it was estimated that the cost to companies to replace a call centre advisor is about R110 000. Therefore, this research aims to fill the gap by identifying some of the factors associateded with employee turnover in order to assist managers to institute measures to prevent it.

Personality characteristics, such as hardiness, self-esteem, self efficacy and positive/negative affectivity have the ability to moderate the negative effects of call centres for the agents (Miller and Fisher, 2005). Furthermore, it has been argued that dispositional traits affect the turnover intentions (Chiu and Francesco, 2003).Thus, if this research shows that hardiness moderates the relationship between organisational climate, the perceived fairness of EPM, organisational commitment and turnover intentions, employment agencies and call centre management can take this personality characteristic into consideration when employing call centre agents.

The following research questions stem from the rationale and will be explained in the original research reported in this research report. The questions that will be addressed in the **Data Analysis and Results Chapter** and the **Discussion Chapter** are:

Is there a negative relationship between organisational commitment, organisational climate, the perceived fairness of electronic performance monitoring and turnover intentions?

Does hardiness moderate the relationship between organisational commitment, organisational climate, perceived fairness of electronic performance monitoring and turnover intentions?

Procedure

The researcher sent the call centre a letter (Appendix H) stating the purpose of the study and what their participation would involve. Once consent to conduct the research was granted by the call centre, a covering letter to participants was attached to the questionnaires (Appendix A). The covering letter provided information to the call centre operators (potential respondents) regarding the purpose and the nature of the research. By then the call centre manager had explained to the call centre agents that a private (university) research project was to be conducted in their call centre and that they could choose to participate or not. In addition, it was made clear that their participation would not influence their current job in the call centre. Finally, the researcher went to the call centre and distributed a sufficient number of questionnaires, for all the agents working for the call centre. The questionnaires, including the attached information letter, were left at the front desk, to ensure easy and visible access for each potential respondent. Every questionnaire was placed in an envelope, thus ensuring the confidentiality of their responses.

The desired sample consisted of 100 male and female call centre operators. Unfortunately, due to unexpected changes at the organisation, the call centre that was approached had only 80 seats and from them only 64 questionnaires were returned and ready to use. In order to obtain a reasonable sample size to address the research questions, another call centre was approached. The procedure outlined above including a revised request to the call centre (Appendix H) was followed for the new call centre.

Confidentiality was assured during the collection process as the participants were asked to place the completed questionnaires in a sealed box located in their call centres. The completed questionnaires were taken as consent to participate. The researcher then collected the respondents' questionnaires in person from the sealed box at regular intervals. All the respondents from the two call centres were given the same questionnaires. Once all the data was collected, it was coded/ transcribed and entered into a data set. The relevant statistical analyses were then performed. The participants' answered questionnaires will be destroyed on completion of my degree. It is not possible to identify any individual respondent from the electronic data set. A copy of the original research report will remain with the University.

Method

The purpose of this research is to examine and describe the relationship between organisational commitment, organisational climate, perceived fairness of electronic performance monitoring and turnover intentions. The present study is of quantitative nature, since questionnaires were handed out and then the data statistically analysed. The study has taken the form of a non-experimental research design, more specifically a cross-sectional and ex-post facto design (Babbie, 2004; Rosnow and Rosenthal, 1996). The research is non-experimental, because there was no manipulation of the input variables, no random assignment and there was no control or experimental group (Rosenthal and Rosnow, 1991). Furthermore, the design is cross-sectional, since it was based on observations in a single point in time (Babbie, 2004). The study employed an ex-post facto design because participants were not assigned any level of the independent variable and were already working in the two call centres (and as such had already experienced the organisational climate).

This research design is not suitable for making causal conclusions but does establish the relationship between variables (Rosenthal and Rosnow, 1991; Rosnow and Rosenthal, 1996). The research employs a non-experimental design as the independent variables are difficult to manipulate in an existing workplace. A further advantage in utilising the above design is that the data was gathered in a natural setting (Rosnow and Rosenthal, 1996). The ethical aspects of the research were thus enhanced as it would be unethical to arbitrarily manipulate the conditions of employment. This also provides and allows for high ecological validity, since the measure were taken in a real world setting (Rosenthal and Rosnow, 1991; Rosnow and Rosenthal, 1996).

The data obtained from the current research was recorded and analysed numerically, thus this research study is classified as quantitative. Self-report questionnaires were utilised in order to collect the data. The advantages of using such an approach are that it allows for anonymity (which is crucial for such research) and is convenient for distribution. In addition, self-report questionnaires are also quite economical, thus they can be administered to a large number of people (Babbie, 2004).

Participants

The participants in this research are working adults in the call centre industry. The sample consists of 105 male and female respondents from a call centre in South Africa, from the Gauteng province. All respondents are volunteers. The study has employed purposive sampling strategy (Babbie, 2004) since the research requires the examination of participants that work as call centre operators. Purposive sampling is a type of non-probability and non-random sampling in which the researcher selects the units to be observed on the bases of the researcher's own judgement about which ones will be the most representative (Babbie, 2004).

In addition, biographic data, such as age, gender, race, education and time in this job was collected in order to describe the sample.

The participants in the original research reported in this research report are working adults in the call centre industry. The first sample from Call Centre 1 consists of 64 respondents and the second sample from Call Centre 2 consists of 41 respondents. Both samples are from call centres (i.e. companies for whom their main business is the call centre industry in South Africa), and both are from the Gauteng province. All respondents are volunteers. The study employed purposive sampling strategy (Babbie, 2004) since the original research reported requires the examination of participants that work as call centre operators. Purposive sampling is a type of non-probability and non-random sampling in which the researcher selects the units to be observed on the bases of the researcher's own judgement about which ones will be the most representative (Babbie, 2004).

Description of the Two Samples

There are 64 women and men respondents (call centre operators) from Call Centre 1 and 41 respondents (call centre operators) from Call Centre 2 in South Africa, Johannesburg. In Call Centre 1 , the average age of a call centre operator is 23 years old, the minimum age is 18 and the maximum age is 38 (Table 1). In Call Centre 2 the average age of a call centre operator is25 years old, the minimum age is 19 and the maximum age is 34 (Table 2). With regards to gender in Call Centre 1 , 56% are females and 44% males. In Call Centre 2, 44% are females and 56% males. Tables 1 and 2 show that the ages are similar across the two groups, but the male/female distribution across the two samples is different. Nevertheless, since gender distribution is almost half, it can be inferred that the two samples are similar in terms of age and gender distribution.

The race distributed across the two samples is as follows, in Call Centre 1- 41% (N = 26) of the respondents are Black respondents, 42% (N = 27) are Coloured and 17% (N = 11) are White; in Call Centre 2- 59% (N = 24) of the respondents are Black, 24% (N = 10) are Coloured and 17% (N = 7) are White. Thus, the race distribution across the two call centres is not the same; in the first call centre there is equal distribution of Black and Coloured respondents while in the second call centre the majority of the respondents are Black.

In terms of educational level results were similar across the two samples. In Call Centre 1 there are 76 % (N = 49) that have a matric, 22% (N = 14) that have a diploma and 2% (N = 1) that have a university degree. In Call Centre 2 there are 68 % (N = 28) that have a matric, 27% (N = 11) that have a diploma and 5% (N = 2) that have a university degree. With regards to tenure, respondents from the two call centres on average have been working for these call centres for the same period of time; in Call Centre 1 the average tenure is M = 10.84 and in Call Centre 2 the average tenure is M = 12.27 (Table 1 and Table 2). The differences between the two call centres in terms of tenure is not substantive.

Table 1 Summary Statistics of the CCO Age and Tenure for Call Centre1 (Where N = 64)

Variable	Mean	Std. Dev.	Min.	Max.
CCO Age	23.31	4.4	18	38
Tenure(in months)	10.84	10.7	1	60

Table 2 Summary Statistics of the CCO Age and Tenure for Call Centre 2 (Where N = 41)

Variable	Mean	Std. Dev.	Min.	Max.
CCO Age	24.56	3.09	19	34

Tenure(in months)	12.27	8.83	1	36

Instruments

The original study reported in this research report is of quantitative nature. This implies that the variables can be measured and the nature of the data that was gathered is in the form of numbers from precise measurement (Rosnow and Rosenthal, 1996). The original research reported in this research report followed a survey method approach in that questionnaires were administered to all subjects (Rosenthal and Rosnow, 1991). The questionnaire included a covering letter to all call centre operators inviting them to participate. This letter is included as **Appendix A** of this report and there is also a section of Biographic Data Questions (this is included in this report as **Appendix B**). The next section of the questionnaire is the Organisational Commitment Scale (this is included in this report as **Appendix C**). The Organisational Climate Scale forms the forth section the questionnaire and is included as **Appendix D** in this report. The questionnaire also included the Perceived Fairness of Electronic Performance Monitoring Scale, which is included in this report as **Appendix E**. The last two sections of the original questionnaire given to participants incorporated the Intention to Turnover Scale (this is included in this report as **Appendix F**) and the Hardiness Scale (this is included in this report as **Appendix G**). Furthermore, a detailed analysis of the internal reliability of the scales in this study will be found in the **Data Analysis and Results Chapter**.

Biographic Data Questions- The biographic data questions include five questions that obtain the following variables; namely age, gender, race, education and time in this job. The biographic data questions were designed not to compromise respondents' anonymity and confidentiality.

Organisational Commitment Scale- This measure was designed by Cook and Wall (1980) and examines employee's overall organisational commitment. The study employed Cook and Wall's version of the commitment scale as its strength lies in the clarity of its language and wording being developed specifically for the needs of blue collar workers (Shepherd, Brian P. Mathews, 2000). Furthermore, Clegg and Wall (1981) state that the scale is appropriate not only to blue-collar employees but also to those in white-collar, supervisory and managerial jobs, and to respondents of both sexes. The scale consists of nine items. The items can be grouped in three sub-scales; namely organisational identification, organisational involvement and organisational loyalty - each sub-scale contains three items (Cook and Wall, 1980). The Organisational Commitment Scale has demonstrated internal consistency reliability with Cook and Wall (1980) finding a coefficient alpha of 0.87. Observed reliability for all the scales in the research will be covered in the Data Analysis chapter below.

The organisational identification sub-scale measures the notion of taking pride in the organisation and the internalisation of its goals and values (Shepherd and Mathews, 2000). The organisational involvement sub-scale measures the psychological absorption in the actives of one's role for the good of the employing organisation (Shepherd and Mathews, 2000). Finally, the organisational loyalty sub-scale measures the affection for, and attachment to the organisation; a sense of belongingness manifested as a wish to stay (Shepherd and Mathews, 2000).

Organisational Climate Scale- The measure was designed by Litwin and Stringer (1978). The scale consists of nine sub-scales, such as structure, responsibility, reward, risk, warmth, support, standards, conflict and identity (Litwin and Stringer, 1978). For the purpose of this research only structure, responsibility, reward, warmth and support are included. Organisational Climate Scale includes 31 questions

to measure organisational emphasis on Structure, Responsibility, Reward, Warmth, and Support (Litwin and Stringer, 1978). The Organisational Climate Scale has demonstrated internal consistency reliability with Litwin and Stringer (1978) finding a coefficient alpha of 0.78.

The Structure sub-scale measures the feelings workers have about the constraints in their work situation; namely how many rules, regulations and procedures there are (Litwin and Stringer, 1978). The Responsibility sub-scale measures the degree to which employees have responsibility for the work they do, such as the feeling of "being your own boss"(Litwin and Stringer, 1978). Then, the Reward sub-scales measures the extent to which there are rewards and recognition in the organisation in relation to performance, the feeling for being rewarded for a job well done, the focus on reward versus criticism and punishment (Litwin and Stringer, 1978). The Warmth sub-scale measures the degree to which there is warmth in the organisation and in the relationships of the workers, and the feeling of good fellowship (Litwin and Stringer, 1978). Finally, the Support sub-scale measures the extent to which management supports employees, as well as the degree to which helpfulness exist in the organisation (Litwin and Stringer, 1978).

Perceived Fairness of Electronic Performance Monitoring Scale- This scale was developed by Alder and Ambrose (2000). The four-item scale measures the perceived fairness of the monitoring system. The Perceived Fairness of Electronic Performance Monitoring Scale has demonstrated internal consistency reliability with Moorman and Wells (2003) finding a coefficient alpha of 0.87.

Intention to Turnover Scale- This scale is part of the Michigan Organisational Assessment Questionnaire, which contains number of different scales of measure that examine work attitudes and perceptions. The

Intention to Turnover Scale includes three items which measure employees' intention to leave their job (Cammann, Fichman, Jenkins and Klesh, 1979). The Intention to Turnover Scale has demonstrated internal consistency reliability with Cammann, Fichman, Jenkins and Klesh (1979) finding a coefficient alpha of 0.83.

Hardiness Scale- The measure was designed by Kobasa (1979). The Hardiness scale consists of 30 items and is designed to measure three components; namely control, commitment and challenge (Kobasa, 1979). Three components of hardiness serve as sub-scales for the Hardiness Scale: control, commitment and challenge. The Hardiness scale has demonstrated an internal consistency reliability of coefficient alpha of 0.88 (Kobasa, 1979; Kobasa, Maddi and Kahn, 1982).

The Control sub-scale measures the sense of autonomy and influence on one's future (Kobasa, 1979; Kobasa, et al, 1982). The Commitment sub-scale refers to assigned meaning and purpose to self, others and work (Kobasa, 1979; Kobasa, et al, 1982). The Challenge sub-scale measures the enthusiasm and excitement for life which is perceived as opportunities for growth (Kobasa, 1979; Kobasa, et al, 1982).

Data Analysis

As previously stated this study is quantitative and therefore statistical analysis was performed. The relevant statistical analysis for this study is descriptive statistical analysis; namely means, standard deviations, frequency analysis and percentages, Pearson product –moment Correlation and multiple regression analyses. The primary aim of relating climate, commitment, perceived fairness of electronic performance monitoring to turnover intentions will be addressed by means of Pearson Correlations and multiple regression analyses. The moderating effect of hardiness was addressed by means of moderated multiple regression analyses. In

order to examine differences between the two call centres, two independent sample t-tests were used and Fisher's Z Transformations was used to compare the correlation matrices of the two groups. In addition, the reliability of the psychometric instruments will be assessed as a precursor to examining further statistical results.

Means

Descriptive statistical analysis like means, standard deviation, minimums and maximums were employed in order to describe each item of all the scales in the two call centres. Thus, in order to find where the differences lie within the two call centre all the items of all the sub-scales were examined in detail with regards to their mean scores.

Correlation Analysis

The current study examines an association of variables. Thus, the Pearson product –moment Correlation was utilised to analyse the relationship between variables. Furthermore, Pearson product–moment Correlation was applied in order to assess the relationship between males and females in each scale and also between people low vs high on the hardiness scale. This correlation coefficient is a numerical index that reflects the magnitude and the direction and strength of the association between two variables (Babbie, 2004). The correlation coefficient's numerical value may vary between -1 and +1, which indicates the direction of the relationship. The Correlation Matrix is a convenient way in order to present the inter-correlations among several variables (Babbie, 2004).

Multiple Linear Regression

Multiple linear regression is a method of determining the relationship between a continuous process output and several factors (Fisher, 2005).This statistical analysis is appropriate since it allows for the assessment of the relationship of one dependant variable and several independent variables (Babbie, 2004). Furthermore, multiple regression analysis is useful when the intent of the analysis is for prediction and causal analysis (Baron and Kenny, 1986; Fisher, 2005). Thus, the independent variables are regarded as causes of the dependent variable and the goal is to determine whether a particular independent variable really affects the dependent variable and how strong that relationship is (Fisher, 2005). Thus, this test will be useful for this research project as the intended purpose is to examine if organisational commitment, perceived fairness of EPM and organisational climate have a negative effect on employees intentions to turnover. The multiple regression analysis will be appropriate for the research because the data used is interval and the sample is independent (Howell, 1999).

In addition, the research will utilise a moderator variable, thus it will be a moderated multiple-regression analysis. A moderator is a variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent/ criterion variable (Baron and Kenny, 1986; Aguinis, 2004).

The assumptions underlying multiple regression analysis include, random sampling, independent sampling (independent observations), identical distribution (homogeneity of variance), normal distribution, interval scales and linearity (Lewis-Beck, 1980; Fisher, 2005).

Independent Sample T-tests

Two independent samples t-test's were performed in order to find out if the two call centre samples are significantly different. If the two samples were substantively similar they can be treated as one sample, whereas if they are to be found significantly different on most of the sub-scales they must to be treated as two distinct samples. The T-test is the appropriate test for the current research because the data used is interval and there are two samples that are independent (Howell, 1999). The t-test is a test of difference between the means of only two groups against the back-drop of the between-group variability (Howell, 1999). Furthermore, several t-tests were analysed in order to compare each of the sub-scales from the two call centres.

Assumptions underlying t-tests include random sampling, independent sampling (independent observations), identical distribution (homogeneity of variance), normal distribution, interval scales and procedures must be applied to two independent groups (Howell, 1999).

Fisher's Z Transformation

The Fisher's Z transformation is employed in order to ascertain whether the correlations for the two populations from which the samples are drawn are significantly different (Bloch, 1987). Thus, Fisher's Z transformation examines if the correlation coefficients r for the two call centres, i.e. samples, are significantly different. Fisher's Z transformation functions by transforming the Pearson's correlation coefficient to an approximately normally distributed variable z (Skvortova, Wang and Geng, 2006).

The assumptions underlying the Fisher's Z transformation are that the samples were drawn from two populations which show the same correlations between two variables; the two samples were drawn

independently of each other; and the two samples were drawn randomly from normally distributed populations (Bloch, 1987).

CHAPTER SIX: DATA ANALYSIS AND RESULTS

Introduction

The following chapter presents the results of the statistical analyses that were carried out. The statistical analysis of the raw data was carried out on the SAS computer programme. The reliability of the psychometric instruments was analysed as a precursor to examining further results. As stated in the previous chapters of the research reported in this research project the primary aim is to relate climate, commitment, perceived fairness of electronic performance monitoring to turnover intentions which is addressed by means of Pearson Correlations and multiple regression analyses. A secondary aim of this study is to examine the moderating effect of hardiness which is addressed by means of moderated multiple regression analyses. In order to examine differences between the two call centres two independent sample t-tests are used and Fisher's Z Transformations are used to compare the correlation matrices of the two groups.

Reliability of Psychometric Instruments

The internal reliability for each psychometric measure used in the current study is found in Table 3. The reliability information includes the number of items in each sub-scale, minimum, maximum scores and Cronbach's alpha of internal reliability coefficient. The reliability coefficient provides valuable information for evaluating the tests (Murphy and Davidshofer, 2001; Anastasi and Urbina, 1997). A test or a sub-scale with an alpha coefficient of .60 and above is considered to have satisfactory internal reliability (Murphy and Davidshofer, 2001; Babbie, 2004; Rosnow and Rosenthal, 1996). A brief scan of the table indicated some scales (in particular subscales of the organisational climate measure) demonstrated poor reliability (Table 3). However, Murphy and Davidshofer (2001) and Anastasi and Urbina (1997) argue that there are various factors that may affect the reliability of the scales, namely characteristics of the people taking the test;

characteristics of the test itself; the intended uses of the test scores and the method used to estimate reliability; etc.

TABLE 3

The Initial Internal Reliability of the Organisational Commitment, Organisational Climate, Perceived Fairness of Electronic Performance Monitoring, Intention to Turnover & Hardiness

Variable	No.Items	Min.	Max.	Alpha
Organisational Commitment-Identification	3	1	7	0.47
Organisational Commitment-Involvement	3	1	7	0.47
Organisational Commitment-Loyalty	3	1	7	0.35
Organisational Climate-Structure	8	1	4	0.56
Organisational Climate-Responsibility	7	1	4	0.05
Organisational Climate-Warmth	5	1	4	0.56
Organisational Climate-Reward	6	1	4	0.74
Organisational Climate-Support	5	1	4	0.61
Electronic Performance Monitoring	4	1	7	0.45
Intention to Turnover	3	1	7	0.88
Hardiness- Commitment	10	1	4	0.71
Hardiness- Challenge	10	1	4	-0.11
Hardiness-Control	10	1	4	0.56

It appears that the characteristics of the people taking the test, characteristics of the test itself and the intended uses of the test scores may be some of the reasons that have affected the reliability of some of the sub-scales. Thus, the wording of some of the questions within the hardiness, organisational climate and perceived fairness of electronic performance monitoring may have been unclear and a little complicated to

the participants. In addition, the test scores or respondents did not understand the intended purpose of certain items listed below and thus there was a negative reliability of these items with the total scale. This has influenced the responses of the participants and thus the internal reliability was poor (Table 3). Thus, in order to provide satisfactory internal reliability there was a need to remove the items that may not have been understood by respondents or the intended uses of the test scores was not clear and did correspond to the whole test/scale, since they correlated negatively with the total score of the variable (Table 3).

The items that have been removed in order to improve the reliability of the scales are: within the hardiness scale - items 2, 13, 23 and 30; within the perceived fairness of electronic performance monitoring scale - item 1; and within the organisational climate responsibility sub-scale - items 1, 4 and 5. For example, item 1 from the perceived fairness electronic of performance monitoring scale (i.e. "I am always aware that I am being continuously monitored and recorded") and item 1 from the organisational climate responsibility sub-scale (i.e. "We don't rely too heavily on individual judgement in this organisation; almost everything is double-checked") do not reflect the construct being measured (Appendix E and Appendix D). As a result, the correlations of the items outlined above with the total scale were either negative or weak correlations (Table 3). This also affected the total reliability of these scale, thus these items were removed from the data analysis. In addition, the Organisational Climate sub-scale- Responsibility had a reliability of $\underline{\alpha} = .05$ which is far too low to be of any value and was thus removed from the study (Table 3).

In addition, the internal reliability of the commitment sub-scales, namely identification, loyalty and involvement, were also poor (identification $\underline{\alpha} = .48$; loyalty $\underline{\alpha} = .35$; involvement $\underline{\alpha} = .47$) (Table 3). However, the total internal reliability for the commitment variable is .69 which is satisfactory reliability

(Table 4). Thus commitment will be analysed and discussed as a single variable which incorporates in its meaning the notions of identification, loyalty and involvement.

TABLE 4

Adjusted Internal Reliability of the Organisational Commitment, Organisational Climate, Perceived Fairness of Electronic Performance Monitoring, Intention to Turnover & Hardiness

Variable	No.Items	Min.	Max.	Alpha
Organisational Commitment	9	1	7	.69
Organisational Climate-Structure	8	1	4	.56
Organisational Climate-Warmth	5	1	4	.56
Organisational Climate-Rewards	6	1	4	.74

Organisational Climate-Support	5	1	4	.61
Electronic Performance Monitoring	3	1	7	.60
Intention to Turnover	3	1	7	.88
Hardiness	26	1	4	.79

The internal reliability for each psychometric measure used in the current study is found in Tables 4. The reliability information includes the number of items in each sub-scale, minimum, maximum scores and Cronbach's alpha reliability coefficient. It becomes evident from Table 4 that the internal reliability coefficients vary between .56 to .88. It can thus stated that the adjusted internal reliability of the measures/scales ranges from poor to good. Most reliability scores are adequate, but some caution must be raised when interpreting some of the organisational climate scales. When examining the items of the organisational climate scale, it can be argued that the climate sub-scales tap variety of aspects within a small scale and as such struggle to have a high reliability (Appendix D).

TABLE 5

Summary Statistics of the Organisational Commitment, Organisational Climate, Perceived Fairness of EPM, Intention to Turnover & Hardiness Scales for Call Centre1

Where N_1 (callcentre1) = 64

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**
Organisational Commitment	43.72	7.19	9	63
Organisational Climate-Structure	22.95	3.64	8	32
Organisational Climate-Warmth	14.81	2.88	5	20

Organisational Climate-Rewards	13.89	4.00	6	24
Organisational Climate-Support	12.47	3.03	5	20
Electronic Performance Monitoring	14.20	2.58	3	21
Intention to Turnover	12.30	4.08	3	21
Hardiness	78.63	9.75	26	104

TABLE 6

Summary Statistics of the Organisational Commitment, Organisational Climate, Perceived Fairness of EPM, Intention to Turnover & Hardiness Scales for Call Centre2

N_2 (callcentre2) = 41

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**
Organisational Commitment	47.59	7.39	9	63
Organisational Climate-Structure	24.81	4.38	8	32
Organisational Climate-Warmth	17	2.97	5	20
Organisational Climate-Rewards	18.29	3.39	6	24
Organisational Climate-Support	14.78	2.99	5	20
Electronic Performance Monitoring	14	2.06	3	21
Intention to Turnover	10.02	5.42	3	21

Hardiness	82.59	8.47	26	104

A few summary statistics for the two groups are presented in tables 5 and 6. It appears evident that the means in call centre 2 are higher than in the first call centre. However, in both call centres the means are closer to the maximum possible obtainable scores or in the middle between the minimum and the maximum which implies that on average, respondents within both call centres perceive their call centre environment in a favourable way. They believe that they are committed to their jobs and the organisational structure, warmth, and support are also perceived in a rather positive manner. However, with regards to the rewards in Call Centre 1, $\underline{M}_1 = 13.89$ and in Call Centre 2, $\underline{M}_2 = 18.29$. Thus, the participants in the first call centre do not perceive rewards in a positive manner, whereas in the second call centre rewards are perceived in a more favourable manner. This means that in Call Centre 1 rewards and recognition in the organisation may not be related to performance, and thus CCOs in the first call centre may not feel that they are rewarded for a well done job. Yet, in the second call centre the focus may be on rewards versus criticism and punishment, thus employees perceive rewards in a more positive manner.

Furthermore, in both call centres the perceived fairness of electronic performance monitoring (EPM) is somewhat average or between the minimum and maximum scores. It can thus be argued that roughly equal numbers of employees perceive EMP as fair and unfair. In addition, the intention to turnover (ITT) in the first call centre is higher and closer to the maximum score ($\underline{M}_1 = 12.30$) compared to the second call centre ($\underline{M}_2 = 10.02$). This means that in the first call centre respondents are more inclined to leave their jobs whereas in the second call centre respondents are rather neutral or more inclined to stay in their job. With regards to hardiness, in both call centres respondents perceive themselves as hardy individuals ($\underline{M}_1 = 78.63$ and $\underline{M}_2 = 82.59$).

TABLE 7

Two Independent Samples T-Tests- Organisational Commitment, Organisational Climate, Perceived Fairness of EPM, Intention to Turnover & Hardiness Scales

Call Centre 1 against Call Centre 2

Variable	Method	Variance	DF	t Value	Pr> /t/
Organisational Commitment	Pooled	Equal	103	- 2.66	.0091
Organisational Climate-Structure	Pooled	Equal	103	- 2.35	.0208
Organisational Climate-Warmth	Pooled	Equal	103	- 3.75	.0003
Organisational Climate-Rewards	Pooled	Equal	103	-5.82	.0001
Organisational Climate-Support	Pooled	Equal	103	-3.83	.0002
Electronic Performance Monitoring	Pooled	Equal	103	0.42	.6723
Intention to Turnover	Satterthwaite	Unequal	103	2.44	.0162
Hardiness	Pooled	Equal	103	-2.14	.0351

Table 7 illustrates the results of the t-tests that were carried out on two independent samples. T-tests have determined if there is a significant difference between the means of two independent samples, namely between Call Centre 1 vs Call Centre 2 (Howell, 1999). The Pooled Method for the Variance is reported,

since the equality of variance table (Appendix I.) shows that for all the variables, except intention to turnover (ITT) $\underline{p} > .05$ thus the null hypothesis is not rejected (i.e. Ho: $\underline{\sigma_1^2} = \underline{\sigma_2^2}$ and H_1: $\underline{\sigma_1^2} \neq \underline{\sigma_2^2}$). As such, for these instances homogeneity of variance can be assumed (Howell, 1999). The variance for the intention to turnover variable has $\underline{p} = .04$ thus $\underline{p} < \underline{\alpha}$ thus the null hypothesis is rejected and there is not homogeneity of variance. Thus, the Satterthwaite method had to be reported for this variable (Satterthwaite, 1946).

The results of the t-tests for the organisational climate sub-scales, organisational commitment, intention to turnover and hardiness show that there is a significant difference between Call Centre 1 against Call Centre 2. However, the difference between the two call centres on the perceived fairness of electronic performance monitoring is not significantly different ($\underline{p} = .67$). The scores from the first call centre on the Organisational Climate sub-scales, Organisational Commitment and Hardiness are higher than in the second call centre, thus negative t-tests scores of the differences between the two call centres have been estimated.

While there are distinct differences in the sample means, both samples were randomly gathered from two call centre businesses and the demographic characteristics in the Methodology chapter show that the samples are similar in terms of demographic distribution, i.e. gender, race, education background and tenure. In terms of the two call centres characteristics, both call centres are medium size businesses where the main/core function of the company is call centre. Both call centres are situated in the same suburb in Johannesburg. The two call centres work with large companies and have the same working hours. Other information was not provided from the call centres' management. Nevertheless, the information outlined suggests that the two call centres have similar employees in terms of demographic characteristics, the type, size and location of the two businesses is similar.

Fisher's Z Transformation

The substantive differences in the means of the scales suggest that the analyses will have to account for this. Before considering what form this accounting should take Fisher's Z Transformations were used to examine if the relationships between the variables (i.e. correlations) also differed substantively (Rosenthal and Rosnow, 1991). The Fisher's Z Transformation is utilised in order to find if the two values of r obtained from two samples for the correlations r are significantly different (Bloch, 1987). It is estimated that from 64 comparisons only 4 tests are significantly different (Appendix K). Thus, it can be concluded that the call centres are not substantially different. This means that a single analysis on the two samples can be performed.

However, since the t-tests have shown that the means of the samples are significantly different (Table 7), the statistical procedures i.e. correlations and moderated multiple regression have to account for these differences in the means. Thus, the original research reported in this research report utilises the pooled/partial correlation matrix (partialling for the group variable) and the group variable is included as a covariate in the moderated multiple regression. This means that the means of the two samples are adjusted when these procedures are executed. A partial correlation coefficient quantifies the correlation between two variables when conditioning on one or several other variables or between two samples as it is in this research report (Fuente, Bing, Hoeschele and Mendes, 2004).

TABLE 8

Pearson Partial/ Pooled Correlation Matrix - Organisational Commitment, Organisational Climate, Perceived Fairness of EPM, Intention to Turnover & Hardiness Scales

Call Centre 1 and Call Centre 2

N= 105

1. EPM	1	2	3	4	5	6	7
2. Commitment	0.23*						
3. Structure	0.26**	0.39***					
4. Warmth	0.20*	0.29**	0.41***				
5. Reward	0.33***	0.26**	0.50***	0.54***			
6. Support	0.31**	0.38***	0.51***	0.48***	0.60***		
7. ITT	-0.09	-0.32***	-0.44***	-0.26**	-0.50***	-0.50***	
8. Hardiness	0.22*	0.29**	0.32***	0.19	0.30**	0.27**	-0.24*

* p<0.05, **p<0.01, *** p<0.001

The results from the Pearson Partial/ Pooled Correlation Matrix in Table 8 show that all the correlations are significant. Some of the correlations are with moderate strength i.e. correlations from .30 to .50 and correlations from .50 upwards are considered strong. Thus, only the moderate and strong correlations will be reported and later examined in the Discussion Chapter of this research report.

Table 8 illustrates that the relationships between Structure and Rewards ($\underline{r}$ = .50; $\underline{p}$ = .00); Rewards and Warmth ($\underline{r}$ = .54; $\underline{p}$ = .00); Support and Structure ($\underline{r}$ = .51; $\underline{p}$ = .00); Support and Rewards ($\underline{r}$ = .60; $\underline{p}$ = .00) are strong and positive correlations. This means that when the structure is perceived as clear and not constraining the employees would feel that they are rewarded based on their performance as well as that support exists in the organisation. In addition, the more rewards there are within the organisation the more warmth exists between employees. Management support also seems to be strongly associated with rewards,

thus the more helpfulness there is in the organisation the more rewards are based on a well done job and the focus is on rewards rather than on criticism and punishment.

In addition, there are strong negative correlations between Intention to Turnover and Rewards (r = -.50; p = .00) and between Intention to Turnover and Support (r = -.50; p = .00). Thus, the above significant relationships suggest that the CCO perceive that rewards and management support are strongly and negatively associated with turnover intentions. This means that when employees are not satisfied with the manner in which rewards are provided (e.g. rewards that are not based on performance) the CCOs will intend to leave their jobs. In addition, if management does not provide sufficient level of support to CCOs or support is perceived negatively and not satisfactory, employees will also strongly consider leaving the organisation.

The relationship between Commitment and Support (r = .38; p = .00); between Commitment and Structure (r = .39; p = .00); between Structure and Warmth (r = .41; p = .00); Structure and Hardiness (r = .32; p = .00) as well as Rewards and Hardiness (r = .30; p = .00); between Warmth and Support (; r = .48; p = .00); between Rewards and EPM (p = .00; r = .33) and between Support and EPM (p = .00; r = .31); Support and Hardiness (r = .32; p = .00) are all moderate and positive correlations. This means that the perceived fairness with EPM is associated with rewards and support. Thus, if the structure and rewards are clear and reasonable then the employees will perceive the EPM systems as being used in a fair manner. In addition, the more supportive management is and the where organisational structures (i.e. rules and regulations) are not constraining to the employees, the more committed the call centre agents would be (which is somewhat self explanatory). Furthermore, hardiness is associated with structure and rewards, thus if the structure and rewards are high and positive, the CCOs will feel more resilient/hardy.

In addition, there are moderate and negative relationships between Commitment and Intention to Turnover (r = -.32; p = .00) and Structure and Intention to Turnover (r = -.44; p = .00). These negative relationships are rather logical. If employees are committed, there is no intent to leave their jobs. In addition, when the structure is clear and positive (i.e. there are not a lot of constraints for workers) the CCOs will have a lower level of intention to turnover.

Moderated Multiple Regression Models for all the four Independent Variables

The moderated multiple regressions examined the impact of the moderator Hardiness on the relationships between the independent variables and turnover intentions. Separate regressions were run for each of the independent variables (viz. Commitment, Structure, Warmth, Rewards, Support, and Perceived Fairness of EPM.)

To address the effectiveness of hardiness as a moderator, the hierarchical approach to regression was used (Cramer, 2003). Variables are entered in the following Hierarchical order:

1. A dichotomous dummy variable as a covariate to reflect the mean differences between the two organisations.

2. The independent variable (i.e. one of Commitment, Structure, Warmth, Rewards, Support, and Perceived Fairness of EPM).
3. The moderating variable namely Hardiness.
4. The interaction term (IV * Hardiness).

Table 9 Moderated Multiple Regression Models for Commitment

Parameter	*Parameter Estimate*[1]	*DF*	*RSQ*	*RSQ Change*	*F*	*P*
Intercept	11.95					
Organisation	-1.17	1,103	0.05		5.97	0.02
IV (Commitment)	-1.39	1,102	0.15	0.10	11.72	0.00
Moderator (Hardiness)	-0.78	1,101	0.17	0.02	2.56	0.11
Interaction (IV x Mod)	-0.26	1,100	0.18	0.01	0.51	0.48

Table 9 demonstrates that $\underline{F}_{1,100} = 0.51$; $p = 0.48$; $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of Commitment depends on the level of Hardiness. From Table 9 it becomes evident that the IV (commitment) is a significant predictor, but no further significant predictive power is added by either the moderator as a main effect or as an interaction. As before the relationship is negative, indicating high commitment is associated with low turnover intentions. The organisation variable is used only as a covariate and as such has already been examined.

TABLE 10

Moderated Multiple Regression Models for Structure

[1] Note that in each case the estimated parameters are for the full model.

Parameter	*Parameter Estimate*	*DF*	*RSQ*	*RSQ Change*	*F*	*P*
Intercept	11.95					
Organisation	-1.18	1,103	0.05		5.97	0.02
IV (Structure)	-1.90	1,102	0.24	0.18	24.79	0.00
Moderator (Hardiness)	-0.54	1,101	0.25	0.01	1.25	0.27
Interaction (IV x Mod)	-0.29	1,100	0.25	0.00	0.42	0.52

Table 10 shows that $\underline{F}_{1,100} = 0.42$; $p = 0.52$; $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of structure depends on the level of Hardiness. Furthermore, it becomes evident that the IV i.e. structure is a significant predictor, but no further significant predictive power is added by either the moderator as a main effect or as an interaction. The correlations have already examined the main effect relationships, thus the results are consistent with the correlations indicating a negative relationship with structure and turnover. This means that if the organisational structure is clear, not constraining and perceived in a favourable manner (i.e. rules and regulations do not hamper employees work, but are rather helpful), there will be less intention to turnover amongst such employees.

TABLE 11

Moderated Multiple Regression Models for Warmth

Parameter	*Parameter Estimate*	*DF*	*RSQ*	*RSQ Change*	*F*	*P*
Intercept	11.90					
Organisation	-0.99	1,103	0.05		5.97	0.02
IV (Warmth)	-1.15	1,102	0.12	0.06	7.34	0.01
Moderator (Hardiness)	-0.95	1,101	0.15	0.03	4.10	0.05
Interaction (IV x Mod)	-0.43	1,100	0.16	0.01	0.90	0.34

From Table 11 it becomes evident that $\underline{F}_{1,100} = 0.90$; $p = 0.34$; $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of warmth depends on the level of Hardiness. Table 11 shows that the IV, i.e. warmth; is a significant predictor and the moderator as a main effect is also significant, but the moderator as an interaction effect does not add further significant power to the model. Furthermore, there are negative relationships between warmth and turnover as well as between hardiness and turnover. Thus, the more warmth and feeling of good fellowship there is in the organisation, the less likely it is for employees to want to leave their jobs. This is also inline with the previous statistical results of the correlations.

TABLE 12

Moderated Multiple Regression Models for Rewards

Parameter	*Parameter Estimate*	*DF*	*RSQ*	*RSQ Change*	*F*	*P*

Intercept	11.35					
Organisation	0.53	1,103	0.05		5.97	0.02
IV (Rewards)	-2.43	1,102	0.29	0.23	33.35	0.00
Moderator (Hardiness)	-0.56	1,101	0.30	0.01	1.07	0.30
Interaction (IV x Mod)	-0.41	1,100	0.30	0.01	1.25	0.27

Table 12 shows that $\underline{F}_{1,100} = 1.25$; $p = 0.27$; $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of rewards depends on the level of Hardiness. From Table 12 it becomes evident that the IV, i.e. rewards, is a significant predictor, but no further significant predictive power is added by either the moderator as a main effect or as an interaction. Thus, only the relationship between rewards and turnover is significant while hardiness and the interaction are not. Again the results are consistent with the correlations indicating a negative relationship between rewards and turnover intentions.

TABLE 13

Moderated Multiple Regression Models for Support

Parameter	***Parameter Estimate***	***DF***	***RSQ***	***RSQ Change***	***F***	***P***

Intercept	11.60					
Organisation	-0.32	1,103	0.05		5.97	0.02
IV (Support)	-2.31	1,102	0.29	0.23	33.72	0.00
Moderator (Hardiness)	-0.56	1,101	0.30	0.01	1.49	0.22
Interaction (IV x Mod)	-0.19	1,100	0.30	0.00	0.27	0.60

Table 13 illustrates that $\underline{F}_{1,100} = 0.27$; $p = 0.60$; $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of support depends on the level of Hardiness. Furthermore, it becomes evident that the IV, i.e. support, is significant thus it predicts intention to turnover. However, there is no further significant predictive power added by either the moderator as a main effect or as an interaction. Thus, only the relationship between support and intention to turnover is significant while hardiness and the interaction are not. There was found to be a negative relationship between support and turnover intentions, which is consistent with correlations that were already examined.

TABLE 14

Moderated Multiple Regression Models for Perceived Fairness of Electronic Performance Monitoring (EPM)

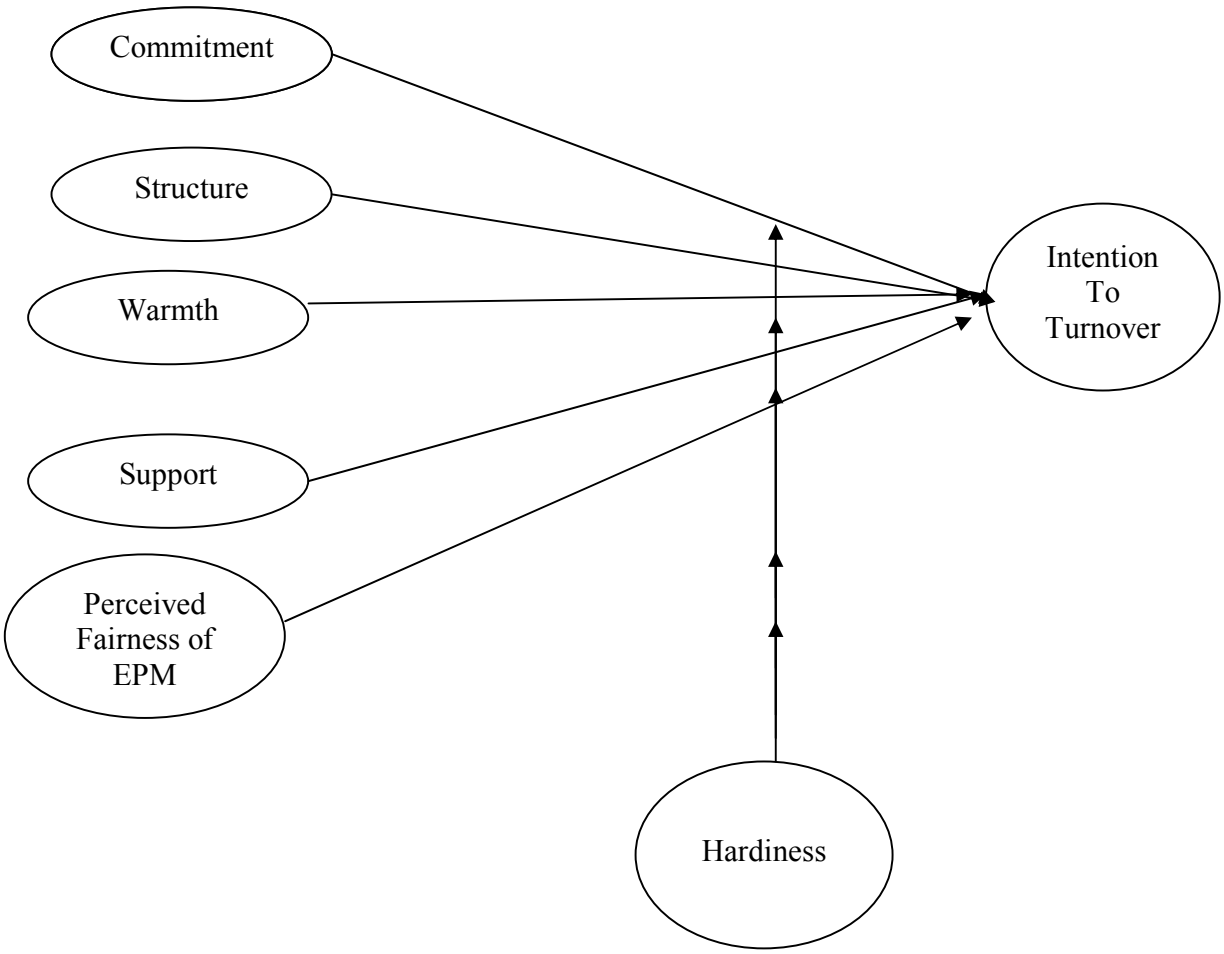
Parameter	***Parameter Estimate***	***DF***	***RSQ***	***RSQ Change***	***F***	***P***
Intercept	12.09					
Organisation	-2.01	1,103	0.05		5.97	0.02

IV (EPM)	-0.18	1,102	0.06	0.01	0.86	0.36
Moderator (Hardiness)	-1.09	1,101	0.11	0.05	5.23	0.02
Interaction (IV x Mod)	-0.51	1,100	0.12	0.01	0.98	0.33

Table 14 illustrates that $\underline{F}_{1,100} = 0.98$ $p = 0.33$, $p > \alpha$ thus $\underline{F}$ for the interaction effect is not significant. That means that there is insufficient evidence to indicate that the effect of depends on the level of Hardiness. From the above table it becomes evident that the moderator as a main effect is significant and has predictive power. Nevertheless, the IV, i.e. perceived fairness of EPM, and the moderator as an interaction are not significant. Thus, the relationship between perceived fairness of EPM and intention to turnover moderated by hardiness is significant while perceived fairness of EPM and the interaction are not. Again the results are consistent with the correlations.

In general the results show no interactions between hardiness and the independent variables. The results are broadly consistent with the simple correlations with the exception that hardiness is not always related to the dependent variable. This is most likely due to the presence of multicollinearity (Draper and Smith, 1981). This is evident in that Hardiness shows significant correlations with almost all of the independent variables. Thus, multi-collineary will be further exaggerated by the moderator terms as they are correlated with both the IV's and the moderators and may account for the somewhat unexpected lack of significance in the moderator terms.

The Intention to Turnover Model



CHAPTER SEVEN: DISCUSSION OF RESULTS

Introduction

In today's workplace, the utilisation of technology is widespread across various industries and businesses. Yet, the adoption of information and communication technologies has various implications for work practice. These sophisticated technologies have become the major tools for millions of workers. Due to the prevalence of technology in many different types of businesses and organisations, new forms of work practices are emerging, which have various effects on employees' attitudes, behaviours and, more

specifically, turnover intentions. The manner in which some of these technologies (in this study we examined the perceived fairness of EPM) affect the call centre agents' intentions to stay or leave the organisation is one of the central issues of this research project and will be discussed later in this chapter.

The climate within the call centre industry has been described by many research reports as highly monotonous, routinised,and repetitive, with poor job attitudes in a work demanding interpersonal and technical skills (Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002; Owen, 2002). Yet, other studies suggest that the call centre environment is on a continuum from Tayloristic to Empowered - i.e. highly driven by target and lack of employee involvement versus giving people some autonomy and knowledge (Miller and Fisher, 2005; Holman, 2002; 2005). Because of this, this study has examined the association between employees' commitment level, the way in which they perceive the climate (satisfactory/positive or not in their call centres) and its effects on their intentions to leave their jobs or stay in the organisation.

Turnover is an issue of critical importance to managers. Some of the challenges that occur as a result of turnover include lack of employee continuity and organisational stability, high costs involved in the selection and training of new staff and organisational productivity (Robinson and Morley, 2006; Carmeli and Gefen, 2005; Chiu and Francesco, 2003; Wallace and Eagleson, 2004; Siong, Mellor, Moore and Firth, 2006). Yet turnover is highly prevalent within the call centre industry; studies within this industry in Australia reported full-time staff turnover (resignations) at being 26% per annum and part-time staff turnover at 40% per annum (Wallace and Eagleson, 2004). A South African study done by Lewis (2001) found that the turnover rate in call centres is 30% a year which is due to the high levels of stress, monitoring and target driven climate. Another study by Owen (2002) executed within the South African banking call

centre industry suggests that 50% of call centre agents indicated a low intention to stay with the organisation in the short to medium term.

In addition, it is very expensive to replace a call centre agent in South Africa;, the cost to an organisation to replace a single call centre agent is on average approximately R110000 (Wallace and Eagleson, 2004; Owen, 2002) It is in this light that the present research aimed to identify some of factors that influence and are associated with employee turnover. The current report has thereforeexamined organisational commitment, organisational climate and perceived fairness of EMP with regards to their influence on turnover intensions. In addition, hardiness was observed and analysed in terms of its moderating effect within the above relationships.

Miller and Fisher (2005) and Chiu and Francesco (2003) suggest that personality characteristics have the ability to moderate the negative effects of call centres for the agents. Thus, this research has examined hardiness as a moderator of the relationships between organisational climate, the perceived fairness of EPM, organisational commitment and turnover intentions.

Section 1: The Organisational Commitment, Organisational Climate and Perceived Fairness of EPM Related to Turnover Intentions

The Relationship between Perceived Fairness of EPM and Turnover Intentions

The results of the current study in tables 5 and 6 showsthat the CCOs perceived as fair and rather positively, since the means of perceived fairness of EPM in both call centres are closer to the maximum score. This means that the manner in which EPM has been used in the two call centres is fair as call centre agents are satisfied with its application. Furthermore, in these two call centres, EPM may have been used for development purpose rather than for punishment purpose. This supports Holman's (2002) and Moorman and Wells's (2003) findings which suggest that EPM can be applied in a positive and fair manner. What's more, the findings of the current research with regards electronic monitoring also reconfirm Eason's (2002) research arguments/findings where he states that the technology can be used to enhance human effectiveness and well-being at work and to facilitate co-operation between workers. The current research findings for the performance monitoring suggest and confirm that the call centres in South Africa may be managed in a more liberal manner. Thus, performance monitoring is perceived as fair, reasonable and adequate. The above findings do not oppose the arguments raised by Moorman and Wells (2003) and Aiello and Kolb

(1995). The explanation behind the above findings could be that the call centre workers in this study may be able to reach their quantity targets and at the same time management may have set targets in a reasonable and fair manner. Thus, the respondents in the current research are neutral or towards the positive end of the fairness of EPM scale continuum.

In addition, the results of the Pearson pooled correlations (Table 8) and the moderated multiple regression analysis (Table 14) propose that the relationship between perceived fairness of EPM and turnover intentions is not significant and EPM fairness does not predict intentions to turnover within both call centres. This is not in accordance with previous research findings, which suggest that if EPM is structured to contain elements of appropriate processes, such as adequate notice, fair hearing and judgment based upon evidence, and thus would be perceived by employees as procedurally fair will be related to or influence employees intention to turnover (Kidwell and Bennett, 1994); Moorman and Wells, 2003; Johnston and Cheng, 2002). In turn this perceived procedural fairness in monitoring can lead to positive employee reactions and thus decrease turnover intentions, absenteeism, sabotage, resignation and increase productivity, satisfaction and some forms of organisational citizenship (Kidwell and Bennett, 1994; Johnston and Cheng, 2002). Previous findings by Levi (1995) also suggest that EPM is linked to various health problems like stress, high tension, extreme anxiety, headaches, etc, which in turn lead to increase level of absenteeism, actual turnover and turnover intension (Levy, 1995).

Yet, the findings of the research do not support the relationship between turnover intentions and the perceived fairness of EPM as no significant relationship was found between these two variables. A plausible explanation for this may be that call centre agents are probably aware of that fact that EMP is present or prevails in most call centres in South Africa and thus they have come to accept that fact. Therefore, the

EPM utilisation would not be a reason for them to choose to either stay or leave their job or the call centre as there will also be EPM in the next call. Additionally, with regards to the fairness of EPM, once they start working in the call centre only then they can perceive/access if the EPM systems are utilised in a fair manner. These could be some of the reasons which explain the results that the perceived fairness of EPM is not a predictor of turnover intentions.

The Relationship between Organisational Commitment and Turnover Intentions

Research done within the South African call centre industry suggests that call centres are a core element of the business functions and operations (Owen, 2002; Lewis, 2001; Omar, 2001). But call centres have been reported to have negative and highly stressful work climates which have negative influences on CCOs commitment (Stewart, Bing, Gruys and Helford, 2007; Little and Dean, 2006; Holman, 2002; 2003; 2005; Frenkel, et al, 1998; Deery and Walsh, 2001). It is therfore argued that there is lack of employee commitment and loyalty within the call centre industry (Owen, 2002; Malhotra and Mukherjee, 2004). Furthermore, Owen's (2002) study found that this lack of commitment was associated with high level of intention to turnover.

The results of the current research reported in this research report returned alternative to those outlined within the theoretical background. The mean results from Call Centre 1 are close to the midpoint but closer to the positive side on the organisational commitment (Table 5). Thus, it can be concluded that on average CCOs in the first call centre tend to be committed. In the second call centre the results suggest that the CCOs are somewhat committed to their jobs (Table 6). These findings may be reiterating the point raised abov; that on average employees perceive their climate positively, the EPM is viewed as fair and there is

management support within the second call centre which also explains the higher commitment results. However, the findings of the current research are rather different to what Owen's (2002) and Malhotra and Mukherjee's (2004) present (where there was lack of employee commitment in the call centre industry). This means that perhaps the management within the two South African call centres of the current research report is somewhat more empowering, liberal and is driven by sensible and realistic targets rather than purely quantity-driven, Taylorist targets (Miller and Fisher, 2005). It can thus be argued, within the two call centres examined here, the jobs have been redesigned and the employees empowered. The employees therefore feel committed to their jobs.

In an 'empowered' job, a semi-professional CCO has high degree of control over how the job should be executed and is required to combine an extensive product or service knowledge as well as display customer service skills (Holman, 2005). With regards to the empowered job design in call centres there is a variety of calls and tasks in which problems are handled by the CCO. Therefore, the CCO from the two call centres in the current study may perceive their job design as giving them variety of tasks, autonomy over the calls and customers and that feedback is used in a developmental manner. Furthermore, the employee commitment that has been found in the two call centres may be attributed to an 'empowered' job design, CCOs may have freedom to decide how long their calls are and what procedures to follow. In addition, in the 'empowered' job, calls are longer and generally unscripted (Holman, 2002; 2005).

What's more, the results from the Pearson pooled correlations (Table 8) and the moderated multiple regression analysis (Table 9) are in line with previous research findings, thus suggesting that employee commitment is strongly and negatively related to and predicts turnover intentions. This means that if commitment is high, then turnover will be low and vice versa. This also explains why commitment is

somewhat high as it becomes evident from Tables 5 and 6 that employees are not really intending to leave their jobs. Yet, this is somewhat contrasting to Owen's (2002) research where it has estimated lack of employee commitment where 50% of call centre agents are high risk or have high intention to turnover. This further reinforces the statements that these two call centres tend to follow a more liberal approach where they apply an empowering management approach in which employees feel more involved, identify with their organisation and tend to be more loyal to their work/organisation. Another reason for the discrepancy is thatthe climate is rather warm and structures enhance performance rather than constrain it.

The Relationship between Organisational Climate and Turnover Intentions

Miller and Fisher (2005), Omar (2001), and Fernie and Metcalfe (1997) have described the call centre's climate and image as an electronic sweatshop of the digital era, an electronic panopticon, which is associated with negative work life experience views. However, the results from this study on the Organisational Climate do not illustrate such negative perceptions. In both call centres the organisational climates are characterised by a high degree of warmth and structure (Table 5 and 6). In Call Centre 2 the perceived climate questionnaires results are positive and high on all the organisational climate dimensions; namely structure, warmth, rewards and support (Table 6). Thus, climate is more positive in the second call centre and subsequently the intention to turnover is lower compared to the other call centre. However, results yield high degrees of structure and warmth in both call centres (Table5 and 6). Thus, on average CCO in the two call centres view that there are fewer constraints in their work situation and the climate between co-workers is supportive and co-operative. HoweverManagement is perceived as being more supportive in the second call centre and rewards are seen as more favourable and are given in relation to

performance. There is also the feeling that one is being rewarded for a job well done and that the focus is on on reward versus criticism and punishment.

The reasons behind these findings may lie in the fact that the nature of work, the climate and management in today's call centres have changed in the last couple of years, since Omar (2001), Owen (2002) and Fernie and Metcalfe (1997) ompleted their research. Call centre companies are not only trying to cut costs and improve their services, but are also trying to introduce new, improved models of call centre technology, organisation and support a more liberal and healthier climate. The environment and climate in call centres has been described by certain studies as being characterised by low quality, poor job attitudes, toxic and highly monotonous (Workman and Bommer, 2004; Holman, 2005; Eason, 2002; Parker, 2002). This research project utilises Litwin and Stringer's (1968) theory in order to examine organisational climate. What becomes evident from the research findings of the current research is that the two South African call centres have been perceived in a more positive light i.e. the mean scores of the climate variables are closer to the upper end of the possible range.

The aim of this research report was to find if there is a relationship between turnover intentions and the different climate variables. As it was pointed out in previous research there is a strong association between the call centre climate/environment and intention to turnover or actual turnover. It becomes evident from Tables 10, 11, 12 and 13 that the climate structure, warmth, rewards and support are a significant predictor to turnover intentions. That means that if the climate and all these attributes are perceived in a positive and satisfactory way that the CCOs would not intend to leave their jobs. Yet, if the climate is stressful and negative, more employees will want to leave their call centres and jobs.

In summation, the findings from both call centres on most of the scales tend to lie towards the positive end of the continuum, except the organisational climate rewards and support in Call Centre 1 (Table 5 and 6). This also explains why the intention to turnover in both call centres under examination is also low. This implies that when the structure is clearly defined, when there are fewer constraints in the CCOs work situation, and when the rules, regulations and procedures are less regulated, the call centre agents will not intend to leave their jobs (Litwin and Stringer, 1978). Furthermore, it becomes clear that if employees are committed they will have low intentions to turnover, which is self-explanatory and logical.

These findings are in accordance with previous research findings suggesting that if the climate is favourable, employees are committed, EPM is perceived and utilised in a fair manner and employees are hardy individuals thus they will not want to leave their jobs. The turnover intention is lower in the second call centre and this could be explained by a higher organisational commitment, warmth, support by management, rewards and structures which are viewed in a more favourable/positive light. Additionally, in the first call centre employees are not really satisfied with the rewards and support provided by management.

The results of the correlations in Table 8 and the moderated regression analysis (Table 9; 10; 11; 12; 13; 14) suggest that all the variables i.e. commitment, structure, warmth, rewards and support, except for the perceived fairness of EPM, are related to or predict turnover intentions. These are consistent with the literature review and previous research findings. Thus, even though in the first call centre employees are not satisfied with rewards and support, they still feel neutral and/or do not want to leave their job in the call centre. The reason behind these findings may be that employees in the call centre are working within the South African market context where the unemployment rate is high and wages are rather low (Kingdon and

Knight, 2006; Kingdon and Knight, 2001). Thus, the job of a call centre operator seems much more favourable within the SA market economy rather than within a more developed economy where there is a lower level of unemployment and social securities for unemployed people are more satisfactory. These findings are somewhat contrasting to previous research finding done within Western call centres, where it is argued that call centre agents who will intend to leave the organisation if the circumstances (climate, pay/rewards, management support, etc) are not favourable and/or satisfactory.

Section 2: The Moderating Role of Hardiness on the Relationship between Organisational Commitment, Organisational Climate and Perceived Fairness of EPM and Turnover Intentions

The work in the call centre industry is very stressful and often has a negative impact on individual well-being (Holman, 2002; 2003; 2005). Thus, when comparing across various job types, the call centre agent's job is considered one of the most stressful jobs (Johnson, Cooper and Cartwrigh, Donald, et al, 2005). Miller and Fisher (2005) have described the call centre industry in South Africa and described call centres as 'nerve centres' due to the emotional labour and client-centred operations which involve high amounts of stress for the operator working in them. Individuals high in hardiness experience less anxiety and worry than individuals low in hardiness (Kobasa, 1979; Tjiong, 2000). There are certain individuals that are tolerant and endure the negative and stressful work environments. Such individuals could be said to be hardy as work in the call centre and/or other stressful/pressurised work environments does not negatively affect their well-being or levels of stress. It is believed by Kobasa (1979) that such people may be assumed to posses the characteristics of a hardy individual. It can be further argued that such employees would not intend to leave their jobs either as they are resilient to negative and stressful employment conditions. This is evident within this research report where employees perceive themselves as hardy individuals and their intention to turnover is low i.e. they either do not want to leave the call centre or are neutral (Tables 5 and 6).

The results of the correlations in Table 8 suggest that there is a relationship between Hardiness and employees' commitment, perceived fairness of EPM, support, structure, intention to turnover. Only the relationship between warmth and hardiness is not significant. However, the aim of this research was to establish if hardiness moderates the relationships between the input variables i.e. organisational commitment, climate, perceived fairness of EPM; and the output variable – intention to turnover. It has been

found from the moderated regression analysis (Tables 9, 10, 11, 12, 13, 14) that hardiness is not a statistically significant moderator in any of the above relationships. These results are not consistent with the previous research findings outlined within the literature review. The results infer that (assuming the lack of significance is not a statistical artefact) hardiness is either not a sufficiently powerful personality characteristic to moderate the above relationships or that the impact of the call centre environment undermines the moderating effect.

Thus, this research could not establish that individual differences (in particular hardness) act as a moderator, which assists employees to endure the negative and stressful effect of a particular work environment. It is important to consider whether this lack of significance could have explanations within the call centre environment. In particular, in this study the call centre environment was not perceived negatively and this could explain the lack of significance for the moderator terms in the moderated regression analysis.

Theory suggests that hardiness only takes effect within a highly stressful environment, this is in contrast to the work environment of the present call centres which are perceived somewhat positively (Kobasa, 1979; Tjiong, 2000). Thus, it can be estimated that the work climate within the two call centres under observation are low stress environments and, as such, hardiness as a moderator would be less evident in a low stress environment. This could explain why there was no relationship between hardiness and turnover intentions.

Assuming that hardiness does operate as a moderator there are also two additional statistical explanations for the non-significant results. The first explanation notes that as hardiness is correlated to all the input variables, (with the exception of the warmth climate variable) then multi-collinearity will be present between the independent variables and the moderator and even more so for the interaction term. In this study some of the moderator terms added sufficient variance to be relevant (R-Squared Change close to 1%

for Warmth, Commitment, Rewards, and EPM) and may well have been statistically significant had a larger sample been possible. Multi-collinearity does make it hard to find moderators, especially with small samples and as such the sample size may explain the lack of significance. Secondly, range effects (i.e. small variance due to similar call centres) can reduce the correlations thus making small relationships non significant. It was noted before that respondents who were largely positive about their work environment did not show strong levels of turnover intentions. Again this could have the effect of reducing all of the observed relations making it even harder to observe the moderating effect of hardiness.

Although, this research appears to undermine the effect of hardiness as a moderator, hardiness could well have been operating as a moderator. However, the range effect and multi-collinearity, as explained above, could explain the reason why hardiness was not significant as a moderator.

The findings of the current research project illustrate that most of the call centre agents within the research sample are hardy individuals. The call centre environment attracts those types of individuals and that could also explain the lower level of intention to turnover. Thus, employees in the call centres utilised for the current research are hardy individuals who believe they can control the events in their lives and thus may be more resistant to stress. This could be the reason why the CCO show high levels of commitment. Schultz and Schultz (2006) also suggest that hardy employees exhibit deep commitment to their work and other activities of interest.

CHAPTER EIGHT: CONCLUSION

The present study aims to investigate call centres operators' turnover intentions by means of a research report. In order to do that, turnover intentions and their relationship to organisational climate, organisational commitment, and the perceived fairness of EPM have been examined. The hardiness personality characteristic was also included as a moderator between the above relationships. Furthermore, turnover intentions experiences of call centres' operators from two call centres in Gauteng, South Africa were analysed. The research project has thus examined the call centre literature and research in order to explain the turnover intentions and their relationship to organisational commitment, organisational climate, perceived fairness of EPM and hardiness in call centres. The characteristics and the meaning of a call centre and a call centre operator's role were also examined.

Although some researchers have pointed out that call centre work and management tend to follow a more Tayloristic work design and philosophy, there was evidence that in the South African call centres, work and attitudes maytend to be more positive and empowering. Furthermore, the call centre operator work was described as monotonous, repetitive and toxic, but research suggests it can be redesigned and enriched to provide more positive behaviours. In such situations, employees will be committed and would not intend to leave their jobs. Most literature in America, Europe and South Africa has characterised and described the call centre climate as a 'sweat shop' of the digital era. This research intended to fill a gap in literature and examine the call centres in South Africa in relation to employees' intentions to turnover and the moderating effect of hardiness.

The results from the current study demonstrate that the organisational climate and commitment scores in the two call centres are greater than the average results on the scale. Thus, the CCOs' work life experience and turnover intentions are lower than the average score which suggests that employees are satisfied within those call centres and do not intend to leave their jobs. This does contradict previous research findings. These findings lead to the conclusion that the call centre industry in South Africa may have been redesigned and follows a morelLiberal and empowered work design and organisational climate. The call centre's work design may be more professional and improved, management may be more skilled and the technology that CCO use may be more accessible and easy to operate and is perceived as fair and transparent by the CCOs. Thus, in these call centres the work life experience and the perceived work design is more favourable, preferable and healthier to the CCO where they would intend to turnover.

The reasons for these findings may be explained by the fact that the call centre environment of today and the nature of technology and surveillance has changed in the last couple of years, since Omar (2001) and Fernie and Metcalfe (1997) completed their research. Thus, call centres and companies are probably not only trying to cut costs and improve their services, but they are also trying to introduce new, improved models of call centre technology, organisational processes and provide a more liberal and healthier climate at work. Furthermore, the call centre jobs could have provided opportunities for growth for school leavers e.g. training on call centre technology, customer service or liaison training and other benefits. The training and development provided at the call centres enable the young students (who only have a matric) to acquire certain skills which the CCOs could have found valuable and empowering for their future career path and development as a professional. The two South African call centres' results illustrate positive connotation to this work environment (climate and commitment to the job and the call centre) and lower turnover intention rates.

Additionally, the results show that commitment and organisational climate scales were related to the intention to turnover with the exception of the perceived fairness of electronic performance monitoring. Thus, commitment and climate predict turnover intention. One of the strongest relationships to turnover intention was the relationship with rewards and management support (Table 8). This is self-explanatory as the more people feel valued in terms of financial reward and supervisory support or encouragement the less likely they will be to leave their jobs. Within Call Centre 1 the participants are neutral regarding the support and the rewards aspects of their call centre (Table 5). Yet, the employees of this call centre do not indicate that they want to leave their jobs. This could be explained by the fact that the job of a call centre operator seems much more favourable within the SA market economy than within a more developed economy where there is not such a high level of unemployment and social securities for unemployed people are more satisfactory. These findings are somewhat contradictory to previous research findings done within Western call centres where it is argued that call centre agents will leave the organisation if the circumstances (climate, pay/rewards, management support, etc) are not favourable and/or satisfactory.

In addition, this research study has tested the impact of the hardiness personality trait in terms of moderating the relationship between turnover intention and the attributes of the call centre environment. The work in the call centre industry is purported to be stressful and as a result should have a negative impact on individual well-being (Holman, 2002; 2003; 2005). The findings of the current research project illustrate that most of the call centre agents within the research sample are hardy individuals. The call centre environment attracts those individuals and that could also explain the lower level of intention to turnover. Although hardiness did not moderate the results, the sample size and multi-collinearity restrictions suggest that this may well be an

artefact. A larger sample would be necessary to conclusively demonstrate the lack of moderation in a call centre context.

Limitations of the research

The current study has some limitations, which may have influenced the outcomes and thus future research may consider the following factors.

There were various refusals to participate in the present study and other technical challenges (some of the call centre operators' contracts had been terminated due to contract and project completion). Thus, the sample size had to be acquired from two separate call centre businesses. Furthermore, the sample size remains small given the requirements of the moderated regression analysis. This may have influenced the statistical power of the study.

The current study relied mainly on self-report questionnaire data. Thus, some forms of response bias may have influenced the study. Furthermore, by adopting a quantitative form of measurement, the study necessarily restricted the focus and content of the study. A more open ended approach may well have emphasized other aspects of the call centre environments studied.

In addition, there are certain disadvantages to the volunteer sample, since the nature of the responses could be biased. Furthermore, Babbie (2004) argues that voluntary participation threatens generalisation. In particular, the sample may not be representative of the general population; for example, this study containedno South Africans of Asian descent, even though they make up a sizable portion of the South African workplace.

What's more, the reliability of the initial tests was poor for some scales, in particular subscales of the organisational climate measure. However, reliability was adequate for most of the scales thus it is possible for conclusions to be provided.

The results show no interactions between hardiness and the independent variables. The results are broadly consistent with the simple correlations with the exception that hardiness is not always related to the dependent variable. This is probably due to the presence of multi-collinearity (Draper and Smith, 1981). This is evident in that Hardiness shows significant correlations with almost all of the independent variables. Thus, multi-collineary will be further exaggerated by the moderator terms as they are correlated with both the IV's and the moderators and may account for the somewhat unexpected lack of significance in the moderator terms. This difficulty could only be overcome by either having access to a substantially larger sample or by experimental manipulation of the independent variables (clearly not an option in this study.) In addition, Hardiness moderates stress. This research does not examine stress per se, it only assumes indirect

relationship. This could be the reason why there was no significant relationship of the moderating effect of hardiness.

Suggestions for Future Research

As mentioned above, the present study was of quantitative nature. It may prove useful to incorporate qualitative measures, such as in-depth interviews, in future research. This may yield greater exploration and understanding of the organisational commitment, the perceived fairness of EPM, organisational climate, hardiness of CCOs and the turnover intention within the South African call centre industry. Furthermore, with the use of in-depth interviews, certain new and important variables may arise (which were not accounted for in the measures used in the current study).

The current research examined turnover intentions in two call centres in South Africa in terms of the organisational commitment, the perceived fairness of EPM, organisational climate, and moderated by hardiness. Future research may also incorporate group dynamics and cohesion, as well as supervisory satisfaction and emotional labour scale in order to acquire greater understanding of the different attributes of the call centre industry that contribute to turnover intentions in South Africa call centres. In that way,

various precursor factors associated with employee turnover will be identified in order to assist managers to institute measure to prevent it.

The current research has utilised and examined the hardiness personality characteristics as a moderator variable. Future research could incorporate a different moderator e.g. emotional maturity and emotional intelligence. These variables may also have an effect on employees' resilience levels.

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Appendix A

Good day,

My name is Teodora Kazalarska, and I am conducting research for the purpose of obtaining a Masters degree at the University of the Witwatersrand. My area of focus is turnover intentions in the call centre industry and its relation to the climate, commitment, electronic monitoring and some personal characteristics of call centre operators. The call centre industry is rapidly growing and it has been associated with high levels of call centre agents leaving their jobs. Thus, I would like to examine what may be some of the underlying factors associated with agents wanting to or actually leaving their jobs. For this purpose, I would like to invite you to participate in this study.

Participation in this research will entail completing the attached questionnaire. The questionnaire will take approximately 30 minutes to complete. Participation is voluntary, and no employee will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire. While questions are asked about your personal circumstances, no identifying information, such as your name and I.D. number, is

asked for, and as such you will remain anonymous. Your complete questionnaire will not be seen by any person in this organisation at any time, and will only be processed by myself. Your responses will only be looked at in relation to all other responses. This means that feedback that will be given to the organisation will be in the form of group responses and not individual perceptions. A summary of the completed research findings can be provided to you on request once my research report has been finalised (towards the end of the year). For a copy of the summary of the research findings please contact me on e-mail address included at the end of the letter.

If you choose to participate in this study please complete the attached questionnaire as carefully as possible. Once you have answered the questions, place the questionnaire in a sealed box that will be situated in your workplace, this will ensure that no one will have access to the completed questionnaire, and thus your confidentiality will be ensured. If you return your questionnaire, this will be taken as your consent to participate in the study. This research will contribute both to a larger body of knowledge on the call centre industry and turnover intentions. This research would prove valuable in that it can offer insight to call centre commitment, climate and intentions to leave of the call centre agents and thus can be used in order to improve turnover intentions and the quality of the call centre environment.

Kind Regards- Teodora Kazalarska

A summary of the end results will be provided to the individual participants and the participating organisation on request. Should you require a copy of the summary of the end results can you please contact me at this e-mail address tkazalarska@yahoo.com.

Appendix B

Biographical Questionnaire

1. Age_____
2. Gender_____
3. Race_____
4. Education_____
5. How long have you been working in this call centre_____

Appendix C

Organisational Commitment

1. I am quite proud to be able to tell people who it is that I work for

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

2. I sometimes feel like leaving this employment for good

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

3. I am not willing to put myself out just to help the organisation

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

4. Even if the firm were not doing too well financially, I would be reluctant to change to another employer

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

5. I feel myself to be part of the organisation

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

6. In my work I like to feel I am making some effort, not just for myself, but for the organisation as well

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

7. The offer of a bit more money with another employer would not seriously make me think me think of changing my job

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

8. I would not recommend a close friend to join our staff

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

9. To know that my own work had made a contribution to the good of the organisation would please me

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree

Slightly Agree | Agree | Strongly Agre

Appendix D

Organisational Climate

Structure

1. The jobs in this organisation are clearly defined and logically structured.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

2. In this organisation, it is sometimes unclear who has the formal authority to make a decision.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

3. The policies and organisation structure of the organisation have been clearly explained.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

4. Red-tape is kept to a minimum in this organisation.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

5. Excessive rules, administrative details, and red-tape make it difficult for new and original ideas to receive consideration.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

6. Our productivity sometimes suffers from lack of organisation and planning.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

7. In some of the projects I've been on, I haven't been sure exactly who my boss is.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

8. Our management isn't so concerned with formal organisation and authority, but concentrates instead on getting the right people together for the job.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

Responsibility

1. We don't rely too heavily on individual judgement in this organisation; almost everything is double-checked.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

2. Around here management resents your checking everything with them; if you think you've got the right approach you just go ahead.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

3. Supervision in this organisation is mainly a matter of setting guidelines for your subordinates; you let them take responsibility for the job.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

4. You won't get ahead in this organisation unless you stick your neck out and try things on your own sometimes.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

5. Our philosophy emphasises that people should solve their problems themselves.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

6. There are an awful lot of excuses around here when someone makes a mistake.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

7. One of the problems in this organisation is that individuals won't take responsibility.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

Warmth

1. A friendly atmosphere prevails among the people in this organisation.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

2. This organisation is characterised by a relaxed, easy-going working climate.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

3. It's very hard to get to know people in this company.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

4. People in this organisation tend to be cold and aloof towards each other.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

5. There is a lot of warmth in the relationships between management and workers in this organisation.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

Rewards

1. We have a promotion system here that helps the best man rise to the top.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

2. In this organisation the rewards and encouragement you get usually outweigh the threats and criticisms.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

3. In this organisation people are rewarded in proportion to the excellence of their job performance.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

4. There is a great deal of criticism in this organisation.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

5. There is not enough reward and recognition given in this organisation for doing good work.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

6. If you make a mistake in this organisation you will be punished.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

Support

1. You don't get much sympathy from higher-ups in this organisation if you make a mistake.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

2. Management makes an effort to talk with you about your career aspirations within the organisation.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

3. People in this organisation don't really trust each other enough.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

4. The philosophy of our management emphasises the human factor, how people feel, etc.

Definitely Agree | Inclined to Agree | Inclined to Disagree | Definitely Disagree

5. When I am on a difficult assignment I can usually count on getting assistance from my boss and co-workers.

Definitely Agree	Inclined to Agree	Inclined to Disagree	Definitely Disagree

Appendix E

Perceived Fairness of Electronic Performance Monitoring

1. I am always aware that I am being continuously monitored and recorded

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

2. Given the opportunity, I would change the way the company uses call monitoring to monitor my performance

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

3. I am satisfied with the way the company uses call monitoring to monitor my performance

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

4. The way the company uses call monitoring to monitor my performance is unfair

Strongly Disagree | Disagree Slightly | Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree

Appendix F

Intention to Turnover

1. How likely is it that you will actively look for a new job in the next year?

Not at all Likely Somewhat Likely Quite Likely

Extremely Likely

2. I often think about quitting

Strongly Disagree Disagree Slightly Disagree Neither Agree nor Disagree

Slightly Agree Agree Strongly Agree

3. I will probably look for a new job in the next year

Strongly Disagree Disagree Slightly Disagree Neither Agree nor Disagree

Slightly Agree Agree Strongly Agree

Appendix G

Hardiness

1. Most of my time gets spent doing things that are worthwhile.

Not at all True A Little True Mostly True Completely True

2. Planning ahead can help avoid most future problems.

Not at all True | A Little True | Mostly True | Completely True

3. No matter how hard I try, my efforts usually accomplish nothing.

Not at all True | A Little True | Mostly True | Completely True

4. I don't like to make changes in my everyday schedule.

Not at all True | A Little True | Mostly True | Completely True

5. I am not equipped to handle the "curve balls" that life sends my way.

Not at all True | A Little True | Mostly True | Completely True

6. Working hard doesn't matter, since only the bosses profit by it.

Not at all True | A Little True | Mostly True | Completely True

7. By working hard, you can always achieve your goals.

Not at all True | A Little True | Mostly True | Completely True

8. Most of what happens in life is just meant to be.

Not at all True | A Little True | Mostly True | Completely True

9. When I make plans, I am certain I can make them work.

Not at all True | A Little True | Mostly True | Completely True

10. It's exciting to learn something about myself.

Not at all True | A Little True | Mostly True | Completely True

11. I really look forward to my work.

Not at all True | A Little True | Mostly True | Completely True

12. If I'm working on a difficult task, I know when to seek help.

Not at all True | A Little True | Mostly True | Completely True

13. I won't answer a question until I'm really sure I understand it.

Not at all True | A Little True | Mostly True | Completely True

14. I like a lot of variety in my work.

Not at all True | A Little True | Mostly True | Completely True

15. Most of the time, people listen carefully to what I have to say.

Not at all True | A Little True | Mostly True | Completely True

16. Thinking of your self as a free person just leads to frustration.

Not at all True | A Little True | Mostly True | Completely True

17. Trying your best at work usually pays off in the end.

Not at all True | A Little True | Mostly True | Completely True

18. My mistakes are usually very difficult to correct.

Not at all True | A Little True | Mostly True | Completely True

19. It bothers me when my daily routine gets interrupted.

Not at all True | A Little True | Mostly True | Completely True

20. Most good athletes and leaders are born, not made.

Not at all True | A Little True | Mostly True | Completely True

21. I often wake up eager to take on life wherever it left off.

Not at all True | A Little True | Mostly True | Completely True

22. Lots of time, I really don't know my own mind.

Not at all True | A Little True | Mostly True | Completely True

23. I respect rules because they guide me.

Not at all True | A Little True | Mostly True | Completely True

24. I like it when things are uncertain or unpredictable.

Not at all True | A Little True | Mostly True | Completely True

25. I can't do much to prevent it if someone wants to harm me.

Not at all True | A Little True | Mostly True | Completely True

26. Changes in routine are interesting to me.

Not at all True | A Little True | Mostly True | Completely True

27. Most days, life is really interesting and exciting for me.

Not at all True | A Little True | Mostly True | Completely True

28. It's hard to imagine anyone getting excited about working.

Not at all True | A Little True | Mostly True | Completely True

29. What happens to me tomorrow depends on what I do today.

Not at all True | A Little True | Mostly True | Completely True

30. I try to learn something new through reading or some formal instructions.

Not at all True | A Little True | Mostly True | Completely True

Appendix I

t Test

variable	method	variance	DF	t value	Pr > /t/
COMM_total	**Pooled**	Equal	103	-2.66	0.0091
COMM_total	**Satterthwaite**	Unequal	83.7	-2.64	0.0098
COMM_mean	**Pooled**	Equal	103	-2.66	0.0091
COMM_mean	**Satterthwaite**	Unequal	83.7	-2.64	0.0098

OC_STR_TOTAL	**Pooled**	Equal	103	-2.35	0.0208
OC_STR_TOTAL	**Satterthwaite**	Unequal	74.1	-2.25	0.0271
OC_STR_mean	**Pooled**	Equal	103	-2.35	0.0208
OC_STR_mean	**Satterthwaite**	Unequal	74.1	-2.25	0.0271
OC_RESP_TOTAL	**Pooled**	Equal	103	0.83	0.4094
OC_RESP_TOTAL	**Satterthwaite**	Unequal	93.7	0.85	0.3953
OC_RESP_mean	**Pooled**	Equal	103	0.83	0.4094
OC_RESP_mean	**Satterthwaite**	Unequal	93.7	0.85	0.3953
OC_WARM_TOTAL	**Pooled**	Equal	103	-3.75	0.0003
OC_WARM_TOTAL	**Satterthwaite**	Unequal	83.5	-3.73	0.0003
OC_WARM_mean	**Pooled**	Equal	103	-3.75	0.0003
OC_WARM_mean	**Satterthwaite**	Unequal	83.5	-3.73	0.0003
OC_REW_TOTAL	**Pooled**	Equal	103	-5.82	<.0001
OC_REW_TOTAL	**Satterthwaite**	Unequal	95.1	-6.04	<.0001
OC_REW_mean	**Pooled**	Equal	103	-5.82	<.0001
OC_REW_mean	**Satterthwaite**	Unequal	95.1	-6.04	<.0001
OC_SUP_TOTAL	**Pooled**	Equal	103	-3.83	0.0002
OC_SUP_TOTAL	**Satterthwaite**	Unequal	86.2	-3.84	0.0002
OC_SUP_mean	**Pooled**	Equal	103	-3.83	0.0002
OC_SUP_mean	**Satterthwaite**	Unequal	86.2	-3.84	0.0002
EPM_TOTAL	**Pooled**	Equal	103	0.42	0.6723
EPM_TOTAL	**Satterthwaite**	Unequal	98	0.45	0.6570
EPM_mean	**Pooled**	Equal	103	0.42	0.6723
EPM_mean	**Satterthwaite**	Unequal	98	0.45	0.6570
ITT_TOTAL	**Pooled**	Equal	103	2.44	0.0162
ITT_TOTAL	**Satterthwaite**	Unequal	68.5	2.30	0.0246
ITT_mean	**Pooled**	Equal	103	2.44	0.0162
ITT_mean	**Satterthwaite**	Unequal	68.5	2.30	0.0246
Ha_comm	**Pooled**	Equal	103	-1.98	0.0501
Ha_comm	**Satterthwaite**	Unequal	90.7	-2.02	0.0463
Ha_chal	**Pooled**	Equal	103	-2.47	0.0153

Ha_chal	**Satterthwaite**	Unequal	100	-2.62	0.0101
Ha_cont	**Pooled**	Equal	103	-1.30	0.1949
Ha_cont	**Satterthwaite**	Unequal	101	-1.39	0.1670
Ha_TOTAL	**Pooled**	Equal	103	-2.14	0.0351
Ha_TOTAL	**Satterthwaite**	Unequal	93.8	-2.20	0.0301
Ha_Total_Mean	**Pooled**	Equal	103	-2.14	0.0351
Ha_Total_Mean	**Satterthwaite**	Unequal	93.8	-2.20	0.0301

Equality of Variances					
Variable	**Method**	**Num DF**	**Den DF**	**F Value**	**Pr > F**
COMM_identif	**Folded F**	63	40	1.06	0.8500
COMM_loyal	**Folded F**	40	63	1.30	0.3472
COMM_involve	**Folded F**	63	40	1.17	0.5952
COMM_total	**Folded F**	40	63	1.06	0.8323
COMM_mean	**Folded F**	40	63	1.06	0.8323
OC_STR_TOTAL	**Folded F**	40	63	1.45	0.1872
OC_STR_mean	**Folded F**	40	63	1.45	0.1872
OC_RESP_TOTAL	**Folded F**	63	40	1.32	0.3507
OC_RESP_mean	**Folded F**	63	40	1.32	0.3507
OC_WARM_TOTAL	**Folded F**	40	63	1.06	0.8157
OC_WARM_mean	**Folded F**	40	63	1.06	0.8157
OC_REW_TOTAL	**Folded F**	63	40	1.39	0.2646
OC_REW_mean	**Folded F**	63	40	1.39	0.2646
OC_SUP_TOTAL	**Folded F**	63	40	1.03	0.9470
OC_SUP_mean	**Folded F**	63	40	1.03	0.9470
EPM_TOTAL	**Folded F**	63	40	1.57	0.1293

Equality of Variances					
Variable	**Method**	**Num DF**	**Den DF**	**F Value**	**Pr > F**
EPM_mean	**Folded F**	63	40	1.57	0.1293
ITT_TOTAL	**Folded F**	40	63	1.77	0.0423
ITT_mean	**Folded F**	40	63	1.77	0.0423
Ha_comm	**Folded F**	63	40	1.19	0.5664
Ha_chal	**Folded F**	63	40	1.77	0.0559
Ha_cont	**Folded F**	63	40	1.83	0.0438
Ha_TOTAL	**Folded F**	63	40	1.33	0.3428
Ha_Total_Mean	**Folded F**	63	40	1.33	0.3428

Appendix K

Fisher's Z Transformation

	COMM identif	COMM loyal	COMM involve	COMM total	OC_STR TOT	OC_RESP TOT	OC_WARM TOTal	OC_REW TOTAL	OC_SUP TOTAL	EPM TOTAL	ITT TOTAL	Ha comm	Ha chal	Ha cont	Ha TOTAL
COMM_identif	0.00	-0.46	-0.89	-0.59	0.08	-1.04	0.84	-0.11	-0.10	-0.94	-0.05	-1.72	0.29	-1.50	-1.57
COMM_loyal	-0.46	0.00	0.35	-0.35	-0.95	0.77	0.56	-0.71	-0.04	-1.78	-0.89	-0.02	0.05	-0.83	-0.51
COMM_involve	-0.89	0.35	0.00	0.39	2.87	-1.60	1.41	1.47	1.51	-0.74	-2.05	-0.24	0.92	-1.03	-0.39
COMM_total	-0.59	-0.35	0.39	0.00	0.95	-0.92	1.36	0.33	0.72	-1.57	-1.48	-0.82	0.51	-1.57	-1.14
OC_STR_TOTAL	0.08	-0.95	2.87	0.95	0.00	1.06	0.01	-1.40	-1.13	-0.99	0.85	0.37	0.65	0.45	0.42
OC_RESP_TOTAL	-1.04	0.77	-1.60	-0.92	1.06	0.00	0.90	0.22	1.36	1.38	0.18	0.00	0.80	0.15	0.37
OC_WARM_TOTAL	0.84	0.56	1.41	1.36	0.01	0.90	0.00	1.56	-0.06	-1.72	-1.39	-0.29	-1.06	0.21	-0.68
OC_REW_TOTAL	-0.11	-0.71	1.47	0.33	-1.40	0.22	1.56	0.00	0.79	-0.81	-0.23	-1.23	-0.20	-1.23	-1.59
OC_SUP_TOTAL	-0.10	-0.04	1.51	0.72	-1.13	1.36	-0.06	0.79	0.00	-1.85	-1.40	-0.43	-0.93	-1.05	-1.36
EPM_TOTAL	-0.94	-1.78	-0.74	-1.57	-0.99	1.38	-1.72	-0.81	-1.85	0.00	-0.17	-1.18	-1.39	-3.05	-2.72
ITT_TOTAL	-0.05	-0.89	-2.05	-1.48	0.85	0.18	-1.39	-0.23	-1.40	-0.17	0.00	0.32	-1.16	0.19	0.29
Ha_comm	-1.72	-0.02	-0.24	-0.82	0.37	0.00	-0.29	-1.23	-0.43	-1.18	0.32	0.00	0.00	-1.11	-1.64
Ha_chal	0.29	0.05	0.92	0.51	0.65	0.80	-1.06	-0.20	-0.93	-1.39	-1.16	0.00	0.00	1.11	0.36
Ha_cont	-1.50	-0.83	-1.03	-1.57	0.45	0.15	0.21	-1.23	-1.05	-3.05	0.19	-1.11	1.11	0.00	0.35