Cape Peninsula
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THE RELATIONSHIP BETWEEN BURNOUT AND TURNOVER INTENTION AMONGST EMPLOYEES AT A SELECTED ELECTRONICS MANUFACTURING COMPANY IN SOUTH AFRICA

by

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DECLARATION

I, George Harold Marshall, declare that the contents of this dissertation represent my own unaided work, and that the dissertation has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

GMarshall   24/04/2019

Signed   **Date**

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I wish to thank:

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DEDICATION

Foremost, I thank God Almighty, for blessing me with the opportunity and perseverance to complete this study. I dedicate this study to the memory of my parents, Evelyn and George, who always believed in me and encouraged me to pursue my dreams.

ABSTRACT

The main aim of this dissertation is to examine the relationship between burnout and turnover intention at a selected electronics manufacturing company in South Africa. Voluntary turnover at the selected company has almost doubled during the five years preceding the study. As a result of the considerable pressures faced by employees at the selected company, due to its history of mergers and downsizings, this research proposes that turnover is high because employees are suffering from burnout. The literature review revealed that employees suffering from high burnout are more likely to consider leaving an organisation compared to those experiencing lower levels of burnout.

This study employed a cross-sectional quantitative research methodology to evaluate the relationship between burnout and turnover intention at the selected company. The research data was collected by means of a self-administered structured questionnaire that included the Maslach Burnout Inventory – General Survey (MBI-GS) and a modified version of the Brough and Frame Turnover Intention survey. Although burnout is generally conceptualised as a three-dimensional construct, an analysis of the data in the present study revealed a two-dimensional solution with the MBI-GS items loading on two factors, namely exhaustion/cynicism and professional efficacy.

This study shows that exhaustion/cynicism is the only burnout dimension that is associated with turnover intention at the selected company. According to the results, the levels of exhaustion/cynicism experienced by electronics manufacturing employees are positively significantly related to job cognitions, job search activities, likelihood of leaving and turnover intention. The research identified the job functions of employees and their satisfaction with stakeholder relationships as factors that can influence burnout and ultimately turnover intention at the selected company. According to the results, employees performing functions related to manufacturing indicated significantly higher levels of exhaustion/cynicism compared to those performing other functions. The results show that exhaustion/cynicism is negatively significantly associated with supervisor and subordinate relationships whereas professional efficacy is positively significantly associated with supervisor relationships.

This dissertation concludes with recommendations to reduce burnout and ultimately increase retention of employees at the selected company. It is in the interest of the selected company to introduce training and wellness programmes that are prioritised for managers and factory workers to ensure that the affected employees have the required resources to cope with the job demands during periods of major organisational change.

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GLOSSARY

Acronym	Description
AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variance
BM	Burnout Measure
CPUT	Cape Peninsula University of Technology
CY	Cynicism
DP	Depersonalisation
EE	Emotional Exhaustion
EX	Exhaustion
EX/CY	Exhaustion/Cynicism
ICT	Information and Communication Technology
IT	Information Technology
M	Mean
MBI	Maslach Burnout Inventory
MBI-ES	Maslach Burnout Inventory - Educators Survey
MBI-GS	Maslach Burnout Inventory - General Survey
MBI-HSS	Maslach Burnout Inventory - Human Services Survey
PA	Personal Accomplishment
PE	Professional Efficacy
PSR	Psychosocial Rehabilitation
SD	Standard Deviation
SPSS	Statistical Package for Social Science
USA	United States of America
α	Cronbach's Alpha

CHAPTER ONE
INTRODUCTION

1.1   Background

Nelson Mandela, the first democratically elected president of South Africa and a global champion of peace, famously said; "Let there be work, bread, water and salt for all" (Buthelezi, 2006: 490). This quotation highlights the important link between employment and the basic needs for human survival. The employment status of an individual may be affected by a wide range of variables, and having a job is no guarantee of future employment or sustainability. Burnout is one of the factors that may impact job sustainability as it may increase the intentions of employees to leave their places of employment (Du Plooy & Roodt, 2010: 11).

The main aim of this study is to investigate the relationship between burnout and turnover intention at a selected electronics manufacturing company in South Africa. Findings from this study may contribute to improved wellness programmes to counter burnout in the workplace. The theoretical as well as the practical implications of this study will add to the body of knowledge on burnout research.

In the following sections the framework of the study will be outlined. The first part will describe the research problem and context of the study. Next, the objectives of the study and research questions will be considered. The final part of this chapter will present the research methodology and chapter overview of the study.

1.2   The research context of the study

Various studies across multiple human service professions have concluded that burnout is related to direct interaction with people (Maslach, Jackson & Leiter, 1996: 4; Maslach & Leiter, 2016: 103). Findings from these studies have contributed to the conceptualisation of burnout and has also enabled researchers to develop a suitable instrument to evaluate the concept in a variety of professional contexts. Burnout is described as a three-dimensional concept that comprises feelings of emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach *et al.*, 1996: 4). The concept of burnout has been extended to include occupations other than human service professions (Bakker, Westman & Schaufeli, 2007: 231; Maslach *et al.*, 1996: 20; Maslach & Leiter, 2016: 104).

Identifying and understanding the causes of burnout will be instrumental in determining intervention strategies that seeks to avoid or reduce the dysfunctional

consequences of burnout at the selected company. Researchers have categorised the antecedents of burnout differently over the years. Examples of the common antecedents of burnout are job, role, organisational and personal characteristics (Cordes & Dougherty, 1993: 628-637); situational and individual factors (Maslach, Schaufeli & Leiter, 2001: 407-409; Maslach & Leiter, 2016: 105). This section will only briefly discuss the antecedents that are more directly affected in the current business environment. A more comprehensive discussion of the antecedents of burnout will follow in the next chapter.

The selected company is part of an international business organisation characterised by an aggressive model for innovation and growth. Mergers and acquisitions are instrumental in attaining these objectives, but are often accompanied by layoffs at the company. The selected company has experienced continuous downsizings and retrenchments over the last ten years. As a result, the job demands have increased due to role overload, role conflict and role ambiguity, while the job resources have decreased due to loss of human capital and social support. Most of the employees at the selected company have been affected by retrenchments, which have resulted in some departments not having supervisors or managers and others having new ones. Consequently, employees in the affected departments may receive excessive workloads, conflicting or unclear work instructions and lack of supervisor support. Previous studies have found evidence that increasing job demands and decreasing job resources are significant predictors of burnout for employees (e.g. Maslach & Goldberg, 1998: 65; Maslach *et al.*, 2001: 407; Wang, Huang & You, 2016: 255; Hu, Schaufeli & Taris, 2017: 642; Elci, Yildiz & Karabay, 2018: 57).

Maslach *et al.* (2001: 409) mention that downsizing and mergers are examples of external organisational characteristics that may have negative consequences for the employee that may result in burnout. Major organisational changes such as mergers and acquisitions may trigger perceptions that the psychological contract between the employer and employee has changed, because job demands have increased and job resources have decreased. Continuous downsizing and layoffs at the selected company may be seen by employees as a violation of the psychological contract and may therefore contribute to burnout. Career progress and expectations are job attitudes that may be significant at the selected company, because they may be influenced by multiple factors, including major external changes such as mergers and acquisitions. Lack of career advancement, shifts in expectation and unmet expectations may increase the burnout levels of employees (Cordes & Dougherty, 1993: 636-637; Visser & Rothmann, 2008: 85).

Many studies have found evidence that burnout in the workplace, experienced by individuals, has negative implications for family and friends as well as various stakeholders within the organisation including colleagues, subordinates, supervisors and clients (Jackson & Schuler, 1983; Cordes & Dougherty, 1993: 639-640; Maslach *et al.*, 1996: 38; Maslach *et al.*, 2001: 406; Schaufeli, 2003). The consequences of burnout can be grouped into three categories; namely poor health, negative job attitudes and impaired organisational behaviour (Schaufeli, 2003: 8). Previous research has reported that burnout may cause various physical and mental health outcomes across a variety of occupations, organisations and nations (e.g. Gorter, Eijkman & Hoogstraten, 2000: 261; Maslach *et al.*, 2001: 406; Montgomery, Mostert & Jackson, 2005: 270; Rothmann & Essenko, 2007: 135; Salvagioni, Melanda, Mesas, Gonzalez, Gabani & Andrade, 2017). The selected company operates in its own unique context and employees are not spared from these detrimental consequences of burnout.

Job attitudes have been discussed earlier in this chapter as potential causes of burnout (e.g. Cordes & Dougherty, 1993: 636-637); however some job attitudes are categorised as consequences rather than antecedents of burnout (Wolpin, Burke & Greenglass, 1991; Maslach *et al.*, 2001: 406). Job dissatisfaction and turnover intention are examples of negative job attitudes that may be influenced by burnout via intervening variables; for example hardiness due to high levels of unemployment and poverty in Kenya (Ndetei, Pizzo, Maru, Ongecha, Khasakhala, Mutiso & Kokonya, 2008: 202); affective commitment (Visser & Rothmann, 2008: 86). South Africa has similar concerns with unemployment and poverty, consequently hardiness may also affect the relationship between burnout and job satisfaction at the selected company. Affective commitment is an important variable to consider at the selected company, because it may be influenced directly by mergers and downsizings.

Management has control over some work characteristics that are associated with burnout and may therefore influence the behaviour within an organisation; for example job autonomy and workload (Maslach *et al.*, 2001: 407, 414; Jackson & Schuler, 1983: 60; Schaufeli, 2003: 7; Aiken, Clarke, Sloane, Sochalski & Silber, 2002: 1992; Taris, Stoffelsen, Bakker, Schaufeli & Van Dierendonck, 2002: 17). The current business environment may encourage managers at the selected company to increase employee workloads in an effort to mitigate resource shortages and may, unintentionally, thus contribute to burnout. Increasing workload or decreasing job autonomy are examples of management decisions that may contribute to burnout and

ultimately lead to impaired organisational behaviour; for example absenteeism, turnover and poor performance (Schaufeli, 2003: 8). Turnover intention is the dependent variable in this study and further discussion is important in order to understand the concept. The next section will briefly cover the various aspects of turnover intention.

Previous research on turnover focussed predominantly on job satisfaction and demographic variables as antecedents of turnover intention (Martin, 1979: 313), but subsequent studies expanded this perspective to include a wide variety of approaches; for example the expanded context model of turnover intention (Martin, 1979: 313); labour market school and the psychological school (Morrell, Loan-Clarke & Wilkinson, 2001: 226-227); rational and instinctual models (Rouse, 2001: 282-286); and expanded unfolding model (Lee, Mitchell, Holtom, McDaniel & Hill, 1999: 450, 458, 460). Turnover can be characterized as a voluntary decision of an employee to leave the company (Staw, 1980: 253) and this may prove to be functional or dysfunctional to the organisation (Johnson, Griffeth & Griffin, 2000: 400). Turnover intention is described as an employee seriously considering leaving the company (Mor Barak, Nissly & Levin, 2001: 633).

Some researchers concur that turnover intention is a more practical metric compared to actual turnover statistics that depend on potentially inaccurate and unreliable administrative records (Mitchell, Mackenzie, Styve & Gover, 2000: 340). Various studies prefer this approach (Mor Barak *et al.*, 2001: 629-630), because previous research has verified the significant relationship between turnover intention and actual turnover (Lee & Mowday, 1987: 737; Tekleab, Takeuchi & Taylor, 2005: 153; Hailu, Sisay & Negash, 2016: 195). Additionally, turnover intention can be evaluated with a cross sectional study and this may therefore avoid the logistical shortcomings of a longitudinal study that would be required in the case of actual turnover (Maslach *et al.*, 1996: 34). Mergers and downsizings at the selected company may create challenges for the logistical demands of longitudinal studies. Turnover intention is the dependent variable in this study and remains important to researchers, because it can signal the need for intervention in order to prevent or reduce turnover in an organisation.

High levels of employee turnover may have serious consequences for the quality of service to clients in an organisation (Mor Barak *et al.*, 2001: 626). It is therefore important to analyse the determinants of turnover intention and actual turnover to mitigate such outcomes. Intention to leave is the dependent variable in this study; but

actual turnover is also mentioned in the discussion due to the important association between these variables (e.g. Lee & Mowday, 1987: 737; Mor Barak *et al.*, 2001: 652; Sutherland & Jordaan, 2004: 56). Research has found evidence that some variables are determinants of both intention to leave and actual turnover (Mor Barak *et al.*, 2001: 625). Some of these variables, however, are much better predictors of intention to leave than actual turnover, e.g. burnout, job satisfaction, organisational commitment, professional commitment, stress, social support and physical comfort (Mor Barak *et al.*, 2001: 651). After a review of the literature, Mor Barak *et al.* (2001: 633) grouped the antecedents of intention to leave and turnover into demographic characteristics, professional perceptions and organisational conditions. The following section will briefly discuss the antecedents that are more directly influenced in the current business context.

Previous studies have found evidence that some demographic factors may cause intention to leave or turnover; for example unmet career expectations and higher salary (Janssen, De Jonge & Bakker, 1999: 1366). As noted before, mergers and downsizings at the selected company may lead to burnout by influencing some demographic variables, for example career expectations. This characteristic is therefore important to this study, because career expectations may serve as antecedents to both burnout as well as turnover intention.

Mor Barak *et al.* (2001: 643) categorise professional perceptions into five groups, namely burnout, value conflict, job satisfaction, organisational commitment and professional commitment. Burnout is the independent variable in this study and has been discussed earlier in this chapter. Many studies have found evidence that burnout and its individual components are related to intention to leave or actual turnover; for example amongst public welfare professionals (Lee & Ashforth, 1993a: 369); human service employees (Mor Barak *et al.*, 2001: 625); South African information and communication technology (ICT) employees (Du Plooy & Roodt, 2010: 11); Chinese automobile manufacturing employees (Lin, Jiang & Lam, 2013: 458); Turkish health employees (Elci *et al.*, 2018: 57); and Indonesian auditors (Santoso, Sitompul & Budiatmanto, 2018: 68). The relationship between burnout and turnover intention will be discussed in more detail in the next chapter. Some researchers have found evidence that role ambiguity and role conflict have a negative association with job satisfaction and organisational commitment as well as a positive relationship with turnover intention (Udo, Guimaraes & Igbaria, 1997: 926). This finding highlights the importance of the role stressors in retention of plant managers. As noted previously, mergers and downsizings at the selected company may

contribute to burnout by influencing role ambiguity and role conflict. These variables are therefore also important in this study, because role ambiguity and role conflict may serve as antecedents of both burnout as well as turnover intention.

Organisational conditions are categorised into four groups, namely stress, social support, fairness-management practices and physical comfort (Mor Barak *et al.*, 2001: 643). Several researchers have found evidence that some of these categories are related to factors, such as role overload (Pienaar, Sieberhagen & Mostert, 2007: 62, 66); role ambiguity (Udo *et al.*, 1997: 926); role conflict (Udo *et al.*, 1997: 926) and supervisor support (Brough & Frame, 2004: 8) that may influence turnover intention. As noted before, mergers and downsizings at the selected company may contribute to the burnout of employees by affecting the role stressors and supervisor support. These variables are, therefore, of significance in this study, because each factor may serve as a predictor of both burnout as well as turnover intention.

Some of the determinants of turnover intention and actual turnover do not fit in the three-dimensional categorisation discussed above; for example perceived employment alternatives and shock events (Mor Barak *et al.*, 2001: 644; Lee & Mitchell, 1994: 60). Previous research has found that shock events are more often the dominant predictors of voluntary turnover compared to job dissatisfaction (Holtom, Mitchell, Lee & Inderrieden, 2005: 337, 345). Almost a quarter of the respondents in the study reported mergers and acquisitions as the shock events that predicted either intention to leave or actual turnover. As noted before, the selected company has a history of mergers and acquisitions and will benefit from further discussion of shock events as precursors of turnover intention. Perceived employment alternatives and shock events will be discussed in more detail in the next chapter.

Turnover has many outcomes that may affect the employee, employer and the client such as direct and indirect consequences; for example separation costs and vacant territory costs (Damon, 1990: 48); negative and positive consequences, for example recruitment costs and increased mobility (Staw, 1980: 255, 263). Bowen (1982) proposes two unintended consequences of intention to leave, namely, absenteeism and dismissal. The study suggests that the correlations between these variables and intention to leave will be influenced by job performance. Mor Barak *et al.* (2001: 652) conclude that intention to leave is the strongest precursor of actual turnover, but employment alternatives and management practises also play a significant role in the actual turnover decision. The consequences of turnover intention will be discussed in greater detail in the next chapter.

1.3   Definition of key concepts

1.3.1   Burnout

This study accepts the conceptualisation of burnout as described by Maslach *et al.* (1996: 4). According to this definition, burnout is a multi-dimensional concept with three components, namely, emotional exhaustion, depersonalisation and reduced personal accomplishment. Emotional exhaustion is a feeling that one's energy and emotional resources are drained. Depersonalisation refers to the tendency of employees to distance themselves from their work. Reduced personal accomplishment is characterised by feelings of inadequacy in performing one's job at the expected level of competence. Further research has prompted expansion of the concept of burnout to the education professions and, in the last twenty years, to non-service professions (Bakker *et al.*, 2007: 231, Maslach *et al.*, 1996: 20-21, 28-29).

1.3.2   Maslach Burnout Inventory – Human Services Survey (MBI-HSS)

The original metric for burnout was designed to evaluate burnout in the human service professions (Maslach *et al.*, 1996: 2; Schaufeli, 2003: 4). The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) uses three subscales, namely emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach *et al.*, 1996: 4).

1.3.3   Maslach Burnout Inventory – Educators' Survey (MBI-ES)

The Maslach Burnout Inventory-Educators Survey (MBI-ES) is designed to measure burnout in the education professions and uses the same subscales as the MBI-HSS, but the word "recipient" is replaced with "student" (Maslach *et al.*, 1996: 2, 28-29).

1.3.4   Maslach Burnout Inventory – General Survey (MBI-GS)

The Maslach Burnout Inventory-General Survey (MBI-GS) is designed to measure burnout in occupations other than human service professions and has three subscales namely exhaustion, cynicism and professional efficacy that correspond to the original MBI-HSS, but the items focus more directly on the performance of work rather than interaction with people (Bakker *et al.*, 2007: 231, Maslach *et al.*, 1996: 20-21).

1.3.5 Job demands

Maslach *et al.* (2001: 407) differentiate between quantitative and qualitative job demands. Quantitative job demands describe aspects such as role overload experienced by an employee due to workload and time pressure on the job. Pienaar *et al.* (2007: 62, 63, 66) distinguish between quantitative and qualitative role overload. Quantitative role overload refers to employee perceptions that the time allocated to complete the assigned tasks is insufficient (Ivancevich & Matteson, 1980: 113). Qualitative role overload is associated with employee perceptions that performance standards are too high to complete the assigned tasks. Qualitative job demands refer to aspects such as role conflict and role ambiguity experienced by an employee due to emotional demands at work (Schaufeli & Bakker, 2004: 296; Maslach *et al.*, 2001: 407). Role conflict occurs when incompatible demands and expectations are placed on an employee in the work place. Role ambiguity refers to a situation where an employee receives a lack of information to perform the job at the expected level.

1.3.6 Changing psychological contract

Rousseau (1995: 9, 1989: 124) conceptualise the psychological contract as a unilateral belief by an employee that the employer shall fulfil perceived promises based on mutual exchange. Major developments in the external business environment of the organisation under scrutiny in this study have resulted in significant changes to the workplace as well as the existing psychological contract perceived between the employee and employer (Pines, 2002: 11). Employees of the organisation have viewed the consequences of these technological, culturing, economic and demographic changes as a violation of the psychological contract, because job demands have increased while job resources have decreased. The perceived agreement between the employee and employer has become less satisfying, because employees must work harder, but receive less opportunities and job security.

1.3.7 Turnover

Previous research has defined turnover from many perspectives including: a voluntary decision of an employee to leave the company (Staw, 1980: 253); a voluntary or involuntary change in the organisational membership of an employee (Bluedorn, 1978: 647-648); sales people turnover categorised as voluntarily leaving, dismissals, promotions and uncontrollable leaving (Darmon, 1990: 47-48); turnover classified as voluntary employee driven or involuntary employer driven (Shaw, Delery, Jenkins & Gupta, 1998: 511).

1.3.8 Turnover intention

Previous studies describe various conceptualisations of turnover intention, for example: intervening mental decisions between job attitudes of an employee and the resulting decision to stay or leave (Sager, Griffeth & Hom, 1998: 255); an employee seriously considering resignation (Mor Barak *et al.*, 2001: 633); an individual's estimated probability to quit in the near future (Brough & Frame, 2004: 8); a signal of quitting (Weisberg, 1994: 4). The terms "turnover intention" and "intention to leave" are often used interchangeably in turnover research. This trend will be replicated in the present study.

1.4 Problem statement

The purpose of this study is to describe the relationship between burnout and turnover intention amongst employees at a selected electronics manufacturing company in South Africa. The selected company has experienced significant increases in the level of voluntary turnover during the five years leading up to this study. According to the latest employment equity reports, total staff turnover at the selected company, expressed as a percentage of permanent employees, increased from 10.10% to 14.10% over a five year period. Voluntary turnover almost doubled from 4.71% to 8.39% over the same period. The possible causes of employee turnover are numerous. Maslach *et al.* (2001: 406) maintain that one of the primary causes of turnover is burnout, which can be described as emotional exhaustion, depersonalisation and reduced feelings of personal accomplishment (Cordes & Dougherty, 1993: 622). The selected company has a history of downsizing and layoffs, which have been linked to resource scarcity and role overload. Allen, Freeman, Russell, Reizenstein and Rentz (2001: 149) confirm that downsizing may lead to resource scarcity as well as role overload and according to Cordes and Dougherty (1993: 628) role overload is one of the primary causes of burnout. The present study will therefore attempt to ascertain whether there is a relationship between turnover intention and burnout at the selected company and what the nature of this relationship is. If burnout is found to be positively related to turnover intention, recommendations will be made to reduce levels of burnout and to, ultimately, increase staff retention. The findings of this study will form the basis of future wellness and health programmes at the selected company.

1.5   Objectives of the research

1.5.1 Purpose statement

The purpose of this study is to investigate the relationship between burnout and turnover intention at a selected electronics manufacturing company in South Africa through the use of a quantitative survey methodology.

1.5.2 Research objectives

The primary objective of the study is to use the data from the literature review and a quantitative survey to describe the relationship between burnout and turnover intention amongst employees at a selected electronics manufacturing company in South Africa.

The study has the following secondary objectives:

- To make the research findings available to the management of the selected company in order to ensure that strategic planning addresses burnout and turnover problems adequately.
- To use the research findings as a basis for the implementation of corporate wellness and health programmes at the selected company.
- To build up a library of research data at the selected company for future trend analysis.
- To determine if further research is required on burnout and turnover at the selected company.
- To contribute to burnout and turnover research in South Africa.

1.6   Significance of the research

Voluntary turnover at the selected company has almost doubled during the five years leading up to this study. Due to the considerable pressures faced by employees at the selected company caused by its history of mergers and downsizings, the present research proposes that turnover is high because employees are suffering from burnout. Mergers and downsizings at the selected company may have several negative implications for employees, for example, fear of retrenchment, more job demands and less job resources. Maslach and Goldberg (1998: 65) caution that job demands and lack of key resources are significant predictors of burnout. Furthermore, some researchers have already confirmed the link between burnout and various forms of job withdrawal behaviour including absenteeism, turnover intention and actual turnover (Maslach *et al.*, 2001: 406). Additionally, intention to leave is identified as the strongest predictor of actual turnover and may lead directly to employees leaving the company (Mor Barak *et al.*, 2001: 652). High levels of burnout and turnover may prove to be harmful to the productivity and profitability of an organisation. Research findings from this study will be instrumental in designing

intervention programmes in order to mitigate the detrimental consequences of burnout and turnover at the selected company.

Previous research on burnout focussed almost entirely on the health and service professions (Maslach & Jackson, 1984: 135, 139). Research on burnout was extended in the last twenty years to occupations other than human service and education professions (Maslach *et al.*, 1996: 20-21). At the time of this study, academic literature on burnout in the electronics manufacturing industry was still very limited. This study will add to the body of knowledge by conducting research on the antecedents, outcomes and interrelationships of burnout in the electronics manufacturing industry of South Africa.

1.7   Research questions

The study will test the hypothesis that burnout is positively related to turnover intention by investigating the following research questions:

- What is the level of burnout amongst employees at the selected company?
- What is the level of turnover intention amongst employees at the selected company?
- Is there a difference in the turnover intention of employees with high burnout as opposed to those with low burnout?
- If there is a difference in the turnover intention of employees with high burnout as opposed to those with low burnout, what is the nature of this difference?
- Is there a relationship between burnout and turnover intention at the selected company?

1.8   Hypothesis

The research hypothesis is that a positive correlation exists between burnout and turnover intention amongst employees at a selected electronics manufacturing company in South Africa. There is an expectation that as the levels of burnout increase, so too will turnover intention. The study will test the hypothesis and it is expected that the research findings will prove that employees with high burnout have greater intention of leaving the selected company compared to those with low burnout.

1.9   Delineations and limitations

This study investigates the relationship between burnout and turnover intention at a selected electronics manufacturing company in Cape Town, South Africa. The research will focus primarily on the relationship between the dependent and independent variables, but will not consider the direction of causality between these variables. The selected company is part of an international organisation with

electronics manufacturing plants in various countries across the globe. Due to financial and time constraints it is not practical or feasible to expand the current study to include all electronics manufacturing plants that form part of the parent company. Similarly, this study does not consider all the electronics manufacturing companies in Cape Town, South Africa.

The study used non-probability purposive sampling techniques, therefore the survey results are representative of the target population, but may not necessarily be generalisable to other populations. Research findings from this study cannot be generalised to similar companies in the organisation due to potential organisational, geographical and cultural differences. Seeletse (2001: 505) warns that non-probability sampling cannot produce justifiable generalisations unless additional research is conducted. This issue is not significant to this study because the research is deliberately focussed on conducting an investigation in the selected company. Generalising the conclusions of this study to other populations falls beyond the scope of this study.

Response bias may influence the accuracy of results obtained from questionnaires due to low or incomplete responses, sensitivity to dependent or independent variables and confidentiality concerns (Maslach *et al.*, 1996: 5-7). The researcher has taken several approaches to overcome these challenges. Shortened questionnaires and translation services have improved response rates. In an effort to avoid over sensitisation to burnout, respondents were informed that the survey would evaluate attitudes toward work duties. After participating, all respondents were informed that burnout was the hidden variable under investigation. Anonymously completed questionnaires returned via a collection box system minimised privacy and confidentiality concerns. Additionally, the researcher held meetings with the respondents in order to ensure the provision of complete details and to encourage response completion.

1.10   Research design and methodology

Denzin and Lincoln (in Welman, Kruger & Mitchell, 2005: 8) highlight the fact that quantitative research methods are used to analyse causal relationships between variables. A notable advantage of this approach is that research bias is minimised due to the objective nature of the data in quantitative studies. This study used quantitative research methods to evaluate the relationship between burnout and turnover intention at a selected electronics manufacturing company in South Africa.

1.10.1 Data collection methods and instruments

In an effort to avoid the logistical demands of longitudinal studies, the present study used a cross-sectional survey design. The study used a self-administered structured questionnaire (See Appendix C) consisting of two existing instruments to collate the research data. Section one of the questionnaire collected demographic information and section two assessed the levels of burnout and turnover intention of the participants. Burnout of the respondents was measured using the MBI-GS instrument (Maslach *et al.*, 1996: 2, 20). The MBI-GS was developed for occupations other than the human services professions and sought to measure the three components of burnout, namely exhaustion, cynicism and professional efficacy. Turnover intention was assessed using a modified version of the Brough and Frame Turnover Intention survey (Brough & Frame, 2004: 10). The wording of the questions was changed slightly to make it more appropriate for the target population and the Human Resources manager from the selected company satisfactorily examined the questions for face validity.

Not all of the employees at the selected company had access to email and in an effort to ensure consistency, questionnaires were distributed in the form of hard copies. The questionnaire was designed to be as short as possible so as to make it suitable for completion during off-peak production intervals and, consequently, to minimise work disruption. Questionnaires have many advantages over other approaches, for example being considered less intrusive with lower costs and saving time.

1.10.2 Sampling

The study used a non-probability purposive sampling methodology because it is convenient, economical and easy to use. Questionnaires were distributed to all employees at the selected company, except those that were in the process of retrenchment or relocation and the register of current employees was used as the sampling frame for the study. Temporary employees were also included in the study, because many of them have been with the company for years on short-term contracts. The vast majority of employees at the selected company were included to ensure that the sample was representative of the target population. Seeletse (2001: 505) states that non-probability sampling cannot result in justifiable generalisations unless additional research is conducted. This is not a concern for this study, because the purpose of the study is to evaluate the condition at the selected company. Generalising the conclusions of this study to other populations will provide opportunities for future research.

1.10.3 Statistical analysis

The researcher is not an expert in statistics and therefore contacted the statistics department at Cape Peninsula University of Technology (CPUT) for assistance with data analysis. Statistics techniques that highlight the relationship between the dependent and independent variables were selected in consultation with a registered statistician. Statistical Package for Social Science (SPSS) version 23.0 was used to analyse the research data. The services provided by the registered statistician were free of charge and have contributed to improved reliability and validity of the research findings.

1.10.4 Research ethics

It is important that research is conducted in an ethical manner to ensure that it does not impact negatively on society and the environment. The researcher submitted an application for ethics clearance and received the required approval from the Research Ethics committee of CPUT. Research activities were commenced on receipt of written research approval from the selected company (See Appendix A). The researcher has complied and will continue to comply with the requirements of the selected company, including minimum work disruption, non-disclosure of company name and confidential treatment of company documents. The study has guaranteed anonymity and confidentiality for respondents. It is not possible to link names of respondents to responses or to identify participants, because no names were collected during the survey. Participants were informed of the purpose, procedure and duration of the research. Data collected from the survey has only been used for the purpose of this study and is stored by the researcher in Cape Town, South Africa.

1.11 Brief chapter overview

Chapter 2 comprises the literature review that provides a theoretical framework to describe the relationship between burnout and turnover intention. Previous research on the dependent, independent and intervening variables are analysed in order to provide a historical context for the study and also provides a critical review of the literature. Diagrams are used to graphically illustrate the interrelationships between these variables. The literature review has three sections: firstly, the aspects of burnout are examined, next the characteristics of turnover intention are investigated and finally the relationship between burnout and turnover intention is considered. Chapter 3 presents the research methodology that includes overall research design approach and ethical considerations. The population, sample, data, research instruments and data analysis methods are described, and justifications are provided

for selecting these elements. Chapter 4 presents the results from the self-administered survey. Descriptive statistics of the key variables in the study are discussed and illustrated with tables. Correlations between burnout, turnover intention and some intervening variables are also considered. Chapter 5 presents the discussion of the results and conclusion. This is the final chapter of the dissertation and has four key sections: firstly the results are interpreted in terms of the research questions, secondly the contributions and limitations of the study are considered, next, recommendations are proposed for further research and finally the conclusions of the research are discussed.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter has three sections that discuss the various aspects of burnout, turnover intention and the relationship between these two variables. The first section examines the definition, historical development, measurement, antecedents and consequences of the burnout concept. In the second section the same aspects for turnover intention are considered. The final section includes a review of the literature relating to the relationship between burnout and turnover intention. Diagrams are used to provide graphical illustrations of the various components in order to enhance the discussion.

2.2 The definition of burnout and its historical development

According to Maslach and Jackson (1984: 134-137) research on burnout started in the public and health care professions with studies conducted on emotion and arousal (Maslach, 1979). The term burnout was inherited from the legal services where poverty lawyers experienced a similar phenomenon. From these investigations it was concluded that burnout is not unique to the health care professions, but is more related to working directly with people. During the late 1970s and early 1980s empirical studies were conducted on burnout in a variety of human service professions, including health care, social services, mental health, criminal justice and education. Findings from these studies enabled researchers to clearly conceptualise burnout and to develop a standardised instrument namely, the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981: 101, 1984: 137).

The present study accepts the three-dimensional conceptualisation and operationalisation of burnout as used by Maslach *et al*. (1996: 4). According to this definition, burnout has three components, namely emotional exhaustion, depersonalisation and reduced personal accomplishment that may be experienced by individuals working with people in some capacity. Emotional exhaustion is associated with individuals experiencing feelings of low emotional energy and resources due to interaction with people at work. Depersonalisation is the tendency of individuals to withdraw from clients as a result of negative attitudes or feelings toward them. Reduced personal accomplishment is characterised by negative self-assessment of individuals and is attributed to perceptions of poor job performance or poor interaction with clients. Using this definition makes it possible to overcome the shortcomings of studies that only consider some of the components of burnout. The definition is comprehensive in scope and includes special cases of burnout, for example why

people who do not overwork, but rather have low interest in work duties, are also experiencing the consequences of burnout. Low levels of job interest will likely be reflected in negative attitudes toward work and poor relationships with clients. Maslach *et al.* (1996: 14) confirm the link between burnout and meaningfulness of work. Maslach *et al.* (1996: 5, 20) note that burnout is not interpreted as a dichotomous variable, but is measured on a continuous scale ranging from work engagement to burnout. Work engagement is conceptualised as an energetic state in which individuals are dedicated and confident about performing work duties effectively.

Ganster and Schaubroeck (1991: 239) note that burnout research makes up a significant fraction of the published literature on job stress. Some researchers argue that burnout is a particular type of stress in which strain results from a wide range of work demands, especially personal interaction with people (Ganster & Schaubroeck, 1991: 239; Cordes & Dougherty, 1993: 625; Maslach *et al.*, 2001: 401). Scarfone (1985) defines burnout as a failure to pursue narcissistic satisfaction in the pursuit of ideals, but argues that the concept cannot be clearly differentiated from occupational stress or depression (in Maslach *et al.*, 1996: 16). Maslach and Schaufeli (1993: 9) note that burnout can be defined as prolonged job stress which results from an imbalance of demands and available resources at the workplace. This definition provides support for the process model of burnout. Pines and Keinan (2005: 626) argue that burnout cannot be defined as a form of stress, because the variables have different antecedents, correlates and consequences.

Maslach and Jackson (1986) conceptualise burnout as a process in which emotional exhaustion appears first, next depersonalisation and finally reduced personal accomplishment. According to this process model, emotional exhaustion is caused by excessive or chronic work stressors. Depersonalisation develops as a direct consequence of emotional exhaustion and serves as an isolating mechanism between the individual and the work demands. As depersonalisation persists, feelings of reduced personal accomplishment appear due to perceptions of poor job competence and interaction with clients. A study by Leiter and Maslach (1988: 306) found support for such a model. The process model of burnout has been met with disagreement from a number of researchers (Cordes & Dougherty, 1993: 624). Golembiewski and Munzenrider (1981, 1984, 1988) propose an alternative process model of burnout where depersonalisation leads to reduced personal accomplishment, which in turn leads to emotional exhaustion (Lee & Ashforth, 1993a: 371). Based on post-hoc analyses of results, Lee and Ashforth (1993a: 388) suggest

a revised Leiter and Maslach (1988) model where emotional exhaustion predicts both depersonalisation and reduced personal accomplishment. Taris, Le Blanc, Schaufeli and Schreurs (2005: 238, 243, 251) conclude that previous research has failed to find convincing evidence to support any of the process models mentioned above due to methodological, empirical and conceptual concerns. The authors, however, integrated the Leiter and Maslach (1988) and Lee and Ashford (1993) models and found longitudinal evidence that supported the data better than the other models. The study found that high levels of exhaustion leads to depersonalisation over time, which in turn is associated with higher levels of emotional exhaustion and lower levels of personal accomplishment. Some researchers have argued against sequential relationships amongst burnout components (Schwab & Iwanicki, 1982a; Cordes & Dougherty, 1993: 624). Further discussion of the burnout process model falls beyond the scope of this study and provides opportunities for future research.

Originally, research on burnout focused primarily on people working in the human service professions, for example, health care, social services, mental health, criminal justice and education (Maslach *et al.*, 1996: 3-4; Maslach & Leiter, 2016: 103). Staff in these professions experience intense interaction with other people on a daily basis. Client problems often result in emotional relationships between service providers and recipients. Relationships are further frustrated when solutions to client problems are complex and time consuming. Staff working continuously under such conditions may experience burnout. The original MBI was designed as a burnout measure for the human service professions (Maslach *et al.*, 1996: 2; Schaufeli, 2003: 4). The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) has separate subscales for emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach *et al.*, 1996: 4).

According to Maslach *et al.* (1996: 27-28) educators have high potential for burnout due to the public nature of the teaching professions and increasing pressure from society to operate beyond education boundaries. The credentials of educators are being questioned and communities are blaming teachers for the problems in education. Educators are further troubled by insufficient human and financial resources to meet the high expectations of society. The Maslach Burnout Inventory-Educators Survey (MBI-ES) is an adaptation of the MBI-HSS for the education professions (Maslach *et al.*, 1996: 2). The meaning of the subscales remains the same and the only difference in the items is the substitution of the word "recipient" with "student" (Maslach *et al.*, 1996: 28-29). Both MBI-HSS and MBI-ES focus primarily on human service relationships.

The concept of burnout was extended in the last twenty years to occupations other than human services and education, for example clerical workers, computer technology employees, military personnel and managers (Maslach *et al.*, 2001: 401; Maslach & Leiter, 2016: 104). Leiter and Schaufeli (1996: 229) report that several studies have used the original MBI with occupational groups other than public human service providers. Findings from these studies identified discrepancies between group scores and human service norms. Additionally, researchers found that the factor structure of the MBI was not preserved across other occupational groups. The depersonalisation and emotional exhaustion subscales tended to collapse into one factor when the MBI is used with non-human service occupations.

The Maslach Burnout Inventory-General Survey (MBI-GS) is a new version of the MBI for use with occupations other than human service providers and educators (Maslach *et al.*, 1996: 2). In contrast to the MBI-HSS and MBI-ES, the emphasis of the MBI-GS is on performance of work rather than service relationships (Maslach *et al.*, 1996: 20-21). The MBI-GS has three dimensions that correspond to the MBI-HSS; namely, exhaustion, cynicism and professional efficacy. Exhaustion is similar to emotional exhaustion, but without direct reference to emotions or service recipients. Cynicism replaces depersonalisation and is associated with negative attitudes toward work instead of personal relationships at work. Professional efficacy corresponds to reduced personal accomplishment, but focuses on negative self-assessment of individuals due to perceptions of work performance rather than interaction with people and includes social as well as non-social characteristics of work-related accomplishments. The present study is conducted at a selected electronics manufacturing company in South Africa and consequently uses the MBI-GS as the preferred burnout instrument.

2.3   Measurement of burnout

Schaufeli, Enzmann and Girault (1993: 211-212) conclude that most burnout metrics are self-report instruments. Burnout is therefore primarily accessed on an individual level which contributes to methodological and measurement variances. Maslach *et al.* (1996: 1-2) report that the MBI is now the most widely used instrument for burnout research. The Burnout Measure (BM) is the second most popular burnout instrument after the MBI (Pines & Aronson, 1988; Schaufeli, Bakker, Hoogduin, Schaap & Kladler, 2001: 566) and uses 21 items to assess exhaustion on a seven point scale ranging from never to always (Schaufeli *et al.*, 1993: 205-206, 212). It appears that the BM is not properly operationalised, because burnout is conceptualised as a multi-

dimensional syndrome, but the BM is used as a one-dimensional instrument. The use of the BM is limited, because of its one-dimensional nature which oversimplifies the complex burnout syndrome to mere exhaustion.

The present study uses the MBI as a burnout metric because it has been found to be reliable, valid and easy to administer (Maslach & Jackson, 1981: 100). The original MBI was designed as a burnout measure for human service occupations and consisted of 47 items, each of which was scored on the frequency and intensity scales (Maslach & Jackson, 1981: 101). This preliminary instrument was administered to a sample of 605 individuals from various health and human service occupations, for example police officers, teachers, attorneys, physicians and agency administrators. The resulting data was submitted to a factor analysis from which ten factors emerged. A variety of selection criteria was used to reduce the items of the MBI-HSS from 47 to 25 and the factors from 10 to 4. The 25 item instrument was administered to a new sample of 420 individuals from similar occupations and a factor analysis was conducted on the resulting data. Very similar results were revealed when compared to the first sample. Consequently, the two samples were combined and a confirmatory factor analysis was conducted on the collective sample (n = 1025). The same four factors emerged with three of these having eigenvalues greater than one. These three factors form the 22 items that assess the three subscales of the MBI-HSS.

The nine items of the emotional exhaustion subscale assess feelings of low emotional energy and resources due to work stressors. Depersonalisation has five items that measure negative feelings and attitudes toward clients. Reduced personal accomplishment has eight items that describe negative feelings of competence in work duties or client interaction. Involvement is the fourth factor and has three items that describe feelings of involvement with people (Maslach & Jackson, 1981: 103-104). This factor is not included in the MBI because its eigenvalue is less than unity. The MBI-HSS does not measure the absence or presence of burnout, but rather measures a continuous variable ranging from work engagement to burnout (Maslach *et al.*, 1996: 5). High levels of emotional exhaustion and depersonalisation combined with low levels of personal accomplishment indicate high burnout. Low levels of emotional exhaustion and depersonalisation combined with high levels of personal accomplishment reflect low burnout.

Some researchers have found that the frequency and intensity dimensions of burnout are highly correlated (Gaines & Jermier, 1983: 583; Brookings, Bolton, Brown &

McEvoy, 1985: 144; Maslach *et al.*, 1996: 10-11). Consequently, the current version of the MBI-HSS only measures the frequency dimension of burnout, because it is least similar to other self-report measures of feelings and will therefore minimize potential spurious correlations. It may also contribute to more accurate responses due to standardised and more clearly defined scale ratios. In spite of this correlation some researchers have continued to use the intensity dimension alone (Jackson, Turner & Brief, 1987: 342; Friesen & Sarros, 1989: 182). Previous studies confirmed problematic cross loadings for MBI-HSS items 12 and 16 (Byrne, 1991: 590-591, 1993: 202; Schaufeli & Van Dierendonck, 1993: 637). These are examples of items that load on two factors instead of one. Item 12 is part of the personal accomplishment subscale, but also loads strongly on the emotional exhaustion subscale. Emotional exhaustion, item 16, loads strongly on the depersonalisation subscale as well.

Internal consistency of the MBI-HSS was estimated by Cronbach's coefficient alpha (n = 1,316) with satisfactory reliability coefficients for all three subscales of the MBI, namely, 0.90 for emotional exhaustion, 0.79 for depersonalisation and 0.71 for personal accomplishment (Maslach *et al.*, 1996: 12). Five longitudinal studies found good consistency within each subscale over periods from one to twelve months. The test-retest reliability coefficients identified the emotional exhaustion subscale as the most stable component of burnout. Convergent validity of the MBI-HSS was demonstrated by correlations between individual MBI-HSS scores and external behaviour ratings, job characteristics and personal outcomes (Maslach & Jackson, 1981: 105). Discriminant validity of the MBI-HSS was confirmed by low correlations between burnout and job satisfaction as well as non-significant correlations with social desirability scores (Maslach & Jackson, 1981: 109).

Several studies focused on the stability of the MBI-GS subscales across different settings, occupations and countries (e.g. Schaufeli, Leiter & Kalimo, 1995; Maslach *et al.*, 1996: 22-23; Leiter & Schaufeli, 1996; Richardsen & Martinussen, 2005). Schaufeli *et al.* (1995) report that a confirmatory factor analysis was conducted with some of the samples mentioned above to test a 28-item MBI-GS scale (in Maslach *et al.*, 1996: 22-23). Selection criteria regarding skew, kurtosis and frequency of missing responses were used to reduce the MBI-GS from 28 to 24 items. The MBI-GS was further reduced to 16 items through regression and factor analyses. Schaufeli *et al.* (1995) found that the factor structure of the MBI-GS is stable across nations, namely Finland, Holland and Canada. The same factor structure was confirmed across settings for Canadian employees of a tertiary care hospital and a mental health facility

(Leiter & Schaufeli, 1996). Further confirmatory factor analyses conducted on the tertiary care hospital sample confirmed the three factor structure of the MBI-GS across a variety of occupations including managers, clerical workers, maintenance workers, technologists, therapists and nurses. The three factor structure of the MBI-GS was also validated by other researchers (e.g. Taris, Schreurs & Schaufeli, 1999; Schutte, Toppinen, Kalimo & Schaufeli, 2000: 53; Richardsen & Martinussen, 2005: 289).

Occasionally, studies produce different results, for example Salanova and Schaufeli (2000: 389-390) tested the factorial validity of the Spanish version of the MBI-GS for a sample of technology workers and found a four factor structure. The results demonstrated that the professional efficacy subscale splits into two unrelated dimensions namely attainment of goals and level of self-confidence. The researchers speculate that the unexpected findings may be unique to technology workers or due to issues with translation of the questionnaire. Schutte *et al.* (2000: 55, 63) tested the factorial validity of the MBI-GS by contrasting its one, two and three factor structure models. In the one factor model it is assumed that all MBI items load onto a single factor. The two factor model is based on the assumption that the exhaustion and cynicism subscale items collapse into one factor and professional efficacy items form a separate factor. Confirmatory factor analyses conducted with five occupational groups, namely managers, clerks, foremen, technical professionals and blue-collar workers, found that the three factor structure fitted the data better than the one and two factor models.

Schaufeli *et al.* (1995) analysed the subscales of the MBI-GS and found correlations between the three components of burnout and other constructs including mental strain, physical strain, work overload, role conflict, satisfaction, organisational commitment, job involvement and resource availability (in Maslach *et al.*, 1996: 25). Correlations were also confirmed between the individual MBI-GS scores and written responses from participants (Leiter & Schaufeli, 1996: 241). These correlations provide evidence to support the validity of the MBI-GS and its consistency with the MBI-HSS. Schutte *et al.* (2000: 57) found that the internal consistency is sufficient for the exhaustion and professional efficacy subscales, but that item 13 ("I just want to do my job and not be bothered") should be removed in order to improve the internal consistency of the cynicism subscale beyond 0.70. The low factor loading of cynicism item 13 may be attributed to uncertainty about the meaning of the item; for example, high item scores may be associated with the desire for social isolation or motivation to perform work without interruption (Salanova & Schaufeli, 2000: 390). Previous studies

that used the MBI-GS with South African samples reported mixed results when cynicism item 13 is omitted from the survey (in Rothmann, 2003: 19). Removing item 13 improves the internal consistency in some cases, but in others, result in lower alpha coefficients for the cynicism subscale. Cynicism item 13 was included in the present study.

The MBI-GS has a unique measuring scale for each of the burnout components and provides independent scores for each (Maslach *et al.*, 1996). The individual as well as the combined sub scale scores provide useful measures for understanding and interpreting burnout. The MBI-GS measures burnout using sixteen items on a seven-point scale ranging from "never" to "daily" (Wiese, Rothmann & Storm, 2003: 74). Exhaustion and cynicism have five items each and professional efficacy has six items. The present study used the MBI-GS to assess the burnout levels of employees in a selected company in the South African electronics manufacturing industry. The research sample was made up of non-human service occupations including managers, clerical workers, office workers, production workers, maintenance workers, technicians and engineers.

2.4   Antecedents of burnout

Previous research on burnout has focused predominantly on identifying its causes and, consequently, individuals who are more likely to experience the condition (e.g. Leiter & Maslach, 2009: 332). Many studies highlight the importance of identifying and understanding the causes of burnout in formulating suitable intervention strategies in order to prevent or mitigate the negative outcomes of burnout (e.g. Maslach & Goldberg, 1998: 65; Maslach & Leiter, 2008: 498). Cordes and Dougherty (1993: 628-637) conducted a review of the burnout literature and concluded that the antecedents of burnout can be categorised into three groups, namely job and role, organisational and personal characteristics. Job and role characteristics are variables that are directly associated with the job and include interpersonal relations with clients, role conflict, role ambiguity and role overload. Organisational characteristics are variables that are directly related to the organisation and include contingency of organisational outcomes and job context. Personal characteristics are factors directly associated with the individual and include demographic variables, social support, expectations and career progress.

In more recent reviews of the literature, the antecedents of burnout are categorised as situational and individual factors (e.g. Maslach *et al.*, 2001: 407-411; Maslach & Leiter, 2016: 105). Previous research has consistently focused on these factors in

order to understand the impact of work situation on individual burnout. While burnout research in South Africa has received some attention from researchers, Storm and Rothmann (2003: 41) recommend further research in order to better understand the antecedents and correlates of burnout in South African companies. A review of the literature will be valuable in identifying and understanding the variables that may cause burnout in the selected company.

2.4.1 Situational factors

Figure 2.1 provides a graphical illustration of the different categories of situational factors that are identified as antecedents of burnout. Situational factors are variables that are directly related to the work context and include job, occupational and organisational characteristics (Maslach *et al.*, 2001: 407-409). The researchers suggest that burnout is a more social than individual experience, because correlations between burnout and situational factors are stronger compared to burnout and individual characteristics. This section will expand the discussion on the situational factors of burnout with special emphasis on variables that are more likely to influence the current business environment.
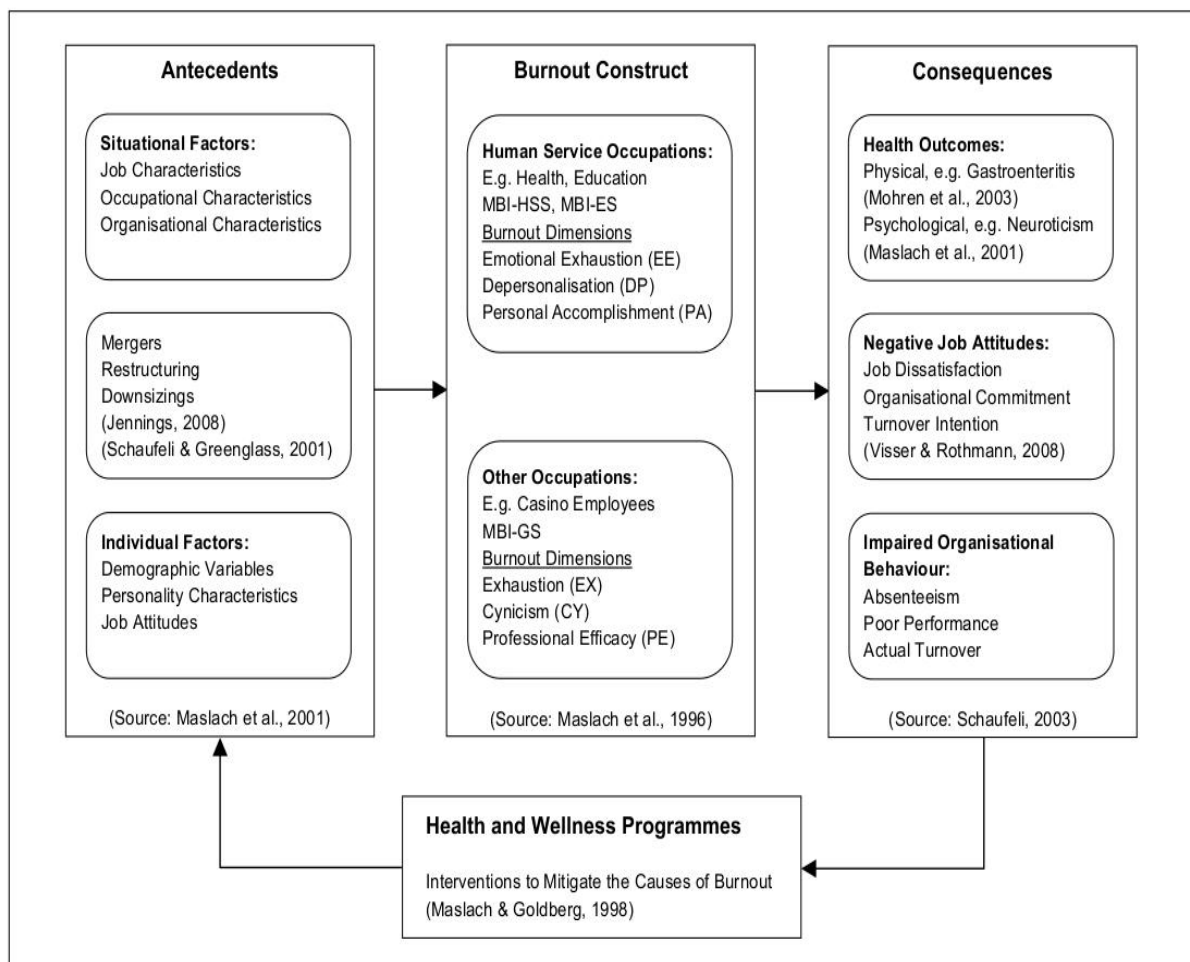
Figure 2.1: Burnout conceptual model

2.4.1.1 Job characteristics

Job characteristics are described as variables that are directly associated with job demands and resources (Maslach *et al.*, 2001: 407). Previous research has highlighted that the presence of job demands and absence of job resources are important antecedents of burnout (Maslach *et al.*, 1996: 36; Maslach & Goldberg, 1998: 65; Wang *et al.*, 2016: 255; Hu *et al.*, 2017: 642). Several studies conducted in South Africa found evidence that job demands and lack of job resources are related to the different components of burnout, for example police personnel (Wiese *et al.*, 2003: 71); educators (Jackson, Rothmann & Van de Vijver, 2006: 272) and registered nurses (Van der Colff & Rothmann, 2009: 1, 8). Some researchers have differentiated between quantitative and qualitative job demands (e.g. Maslach *et al.*, 2001: 407). Quantitative job demands occur when an employee experiences workload and time pressure on the job. Previous research reported strong and consistent correlations between workload, time pressure and burnout. Rothmann and Malan (2006: 1) found that work overload, work-life balance and control were the best predictors of physical and psychological ill-health in a sample of occupational engineers in South Africa. Van Tonder and Williams (2009: 204) found that negative learner profile and workload were the most common predictors of burnout in a sample of secondary educators in South Africa.

Qualitative job demands refer to emotional demands at work that may turn into job stressors if the effort required to meet those demands are high (Schaufeli & Bakker, 2004: 296). Maslach *et al.* (2001: 407) discuss three examples of qualitative job demands, namely role conflict, role ambiguity and severity of client's problems. Role conflict occurs when an employee is confronted with conflicting job demands in the work place. Role ambiguity occurs when an employee experiences a lack of information to perform the job well. According to Cordes and Dougherty (1993: 631) studies on role conflict and role ambiguity have been very limited to date, but have consistently found moderate to high correlations with burnout (Maslach *et al.*, 2001: 407). A study conducted on teacher trainees and first-year teachers reported that role conflict and role ambiguity were significantly related to each other and to total burnout (Fimian & Blanton, 1987: 163). Jackson *et al.* (1987: 347) found that role conflict was strongly related to emotional exhaustion and depersonalisation in a sample of public service lawyers. A study conducted by Leiter and Maslach (1988: 302) on a sample of nurses and support staff found that role conflict was positively related to emotional exhaustion. It is expected that these findings will be similar in other occupations because role conflict and role ambiguity are not unique to the human service occupations. Very few studies have been conducted on other qualitative job demands

such as severity of client problems, but research findings confirm similar correlations with burnout (Maslach *et al.*, 2001: 407).

Previous research on job resources has focused extensively on social support (Maslach *et al.*, 2001: 407). Findings from these studies have confirmed that a lack of social support is related to burnout (e.g. Kim, 2016: 21; Elci *et al.*, 2018: 57). Lack of supervisor support has more serious consequences for the workplace when compared to co-worker support. This is particularly important at the selected company, where employees work in a factory environment that requires interaction between supervisors and co-workers on a daily basis. Jackson *et al.* (1987: 339) found that supervisory social support, in a sample of public service lawyers, was associated with feelings of personal accomplishment. Cordes and Dougherty (1993: 635) conclude, from previous burnout literature, that personal and professional sources of support may have a direct, but sometimes negative effect on burnout. More research is required in order to identify these detrimental effects and to better understand personal sources of support. Burnout researchers have theorised that social support has a buffering effect on the relationship between job demands and burnout (Maslach *et al.*, 2001: 407). The relationship is strong when social support is low, and weak when social support is high. Many studies have been conducted to validate the buffering effect of social support, but the findings have been mixed and are therefore inconclusive. Further studies should focus on this hypothesis in order to determine if the findings are due to methodological or theoretical issues.

Other job resources, for example feedback, decision making and autonomy, have received some attention from researchers (Maslach *et al.*, 2001: 407). These variables are directly associated with information and control on the job. Feedback regarding work performance may come from co-workers, supervisors or clients and may be positive, negative or non-existent. Participation in decision making and autonomy empower employees by allowing greater involvement in work related decisions and more independence in performance of tasks. Previous research found that lack of feedback, lack of autonomy and little participation in decision making are consistently related to burnout. As mentioned previously, the selected company experiences downsizings and retrenchments on a regular basis due to the competitive business strategy of the parent company. Downsizings and retrenchments may lead to higher levels of role overload, because fewer employees may be expected to perform the same amount of work as before. Some departments may be affected by changes in supervisory or managerial roles which may contribute to higher levels of role ambiguity and conflict as well as lower levels of social support.

Increased levels of job demands and decreased levels of job resources may contribute to higher levels of burnout at the selected company.

2.4.1.2 Occupational characteristics

Occupational characteristics refer to variables that are directly related to occupation rather than job, organisational or individual factors. According to Maslach *et al.* (2001: 407-408) the primary focus of burnout research has been, and still is, in the human services and education occupations, where service providers are faced with unique emotional challenges due to intense interaction with other people. Maslach and Jackson (1984: 140) note that many of the occupations that are not included in the helping services sector, but where stressful interpersonal relations are experienced, may be a source of burnout for employees. Research on burnout was extended in the last twenty years to occupations where contact with people was less intense, for example managers and occupations with little interaction with people, for example computer programmers (Maslach *et al.*, 2001: 408). Higher burnout levels are reported when client interaction is intense and characterised by chronic problems (Cordes & Dougherty, 1993: 628, 632). Employees with boundary spanning roles, for example sales representatives, experience more frequent interactions with other people and are therefore more likely to experience burnout than information system specialists.

Previous research has found evidence that burnout is experienced by employees in human service and education occupations as well as other occupations such as mental health care professionals (Geurts, Schaufeli & De Jonge, 1998), educators (Friesen & Sarros, 1989) and software engineers (Taris *et al.*, 1999). Some researchers continue to theorise that emotional stressors from people centred work are uniquely related to burnout in spite of the evidence that burnout is also present in occupations with very little personal interaction. Earlier studies, however, found that job related stressors correlated more highly with burnout than client related stressors and could therefore not provide sufficient evidence for this hypothesis. More recent burnout research focused on emotional work variables and found evidence that these factors uniquely contribute to the prediction of burnout (Zapf, Seifert, Schmutte, Mertini & Holz, 2001: 527).

Findings from studies across occupations in inter departmental or across country settings are susceptible to misinterpretation due to the potential influence of confounding variables and methodological challenges. Gaines and Jermier (1983: 580) found that the level of emotional exhaustion differs across departments for a

sample of police officers and support personnel. Emotional exhaustion levels were lower in the investigations bureau compared to the patrol or service bureaus. The researchers speculated that higher job status of detectives and enriched nature of work were responsible for these differences. Cordes and Dougherty (1993: 632), however, argue that the differences can be attributed to the confounding influence of a speciality area on interpersonal interaction. Police officers experience more frequent interaction with potentially violent individuals and may therefore be more prone to burnout compared to support personnel evaluating evidence in a test laboratory. Future studies should control these confounding variables in order to ensure that the causal relationship between departmental context and burnout is tested.

Studies on burnout profiles for different occupations across countries have received some attention from researchers. Schaufeli and Enzmann (1998) compared the burnout profiles of the teaching, social services, medical, mental health and law enforcement occupations in the United States of America (USA) and Holland (Maslach *et al.*, 2001: 408). The study found fairly similar burnout patterns for the occupational groups in both countries with some exceptions. Law enforcement occupations were characterised by low levels of exhaustion and relatively high levels for the other dimensions. Teaching occupations scored the highest on the exhaustion scale with the other dimensions close to average. Occupations related to medicine were characterised by somewhat higher levels of inefficacy and slightly lower levels for the other dimensions. Burnout patterns of occupations related to social services and mental health care were different across countries. Social services occupations in the USA were characterised by relatively high levels of cynicism compared to average levels in Holland. Mental health occupations in the USA were characterised by lower levels of exhaustion and cynicism compared to higher levels in Holland. Maslach *et al.* (2001: 408) caution that these findings may be due to the influence of confounding variables or heterogeneity of occupations within sectors. This provides opportunities for future research to determine if these findings are national differences or methodological variations.

2.4.1.3 Organisational characteristics

Organisational characteristics refer to variables that are directly associated with the organisation rather than the job, occupational or individual factors. According to Maslach *et al.* (2001: 409) previous research on situational job characteristics focused almost entirely on the demands and resources in the immediate work environment. This approach has limitations, because it ignores the larger organisation

within which the work is performed. Consequently, the work context has been expanded to include the organisational and management environment that is characterised by unique policies, hierarchies, operating rules, resources and space distribution. Business values are instrumental in application of these organisational factors and may influence the emotional relationship between an employee and the job.

Values can be described as the original motivating and idealistic connection between an employee and the work place that exceeds the exchange of time for money or advancement (Leiter & Maslach, 2004: 99-100). The researchers define values conflict on the job as the gap between individual and organisational values that may have detrimental outcomes for work engagement. Values conflict in the workplace may be manifested in several ways such as unethical job behaviour (e.g. tell a lie to make a sale), conflicting organisational values (e.g. actual practice incompatible with mission statement) and mistaken personal expectations (e.g. career advancement concerns). Previous research found that values congruence contributed to prediction of all three components of burnout namely exhaustion, cynicism and professional efficacy (Leiter, Frank & Matheson, 2009: 1225.e3-1225.e4).

Contingent rewards, expectations, fairness and equity are examples of variables that may be influenced by management or organisational policies and may have implications for burnout. After a review of the burnout literature, Cordes and Dougherty (1993: 631-632) concluded that a lack of contingent rewards and the presence of non-contingent punishment are organisational outcomes that may contribute to burnout. Stevens and O'Neill (1983: 615, 626) found that employees with high expectations experience lower levels of burnout if these high expectations are successfully maintained. Employees experiencing large negative expectation change, however, report the highest levels of burnout. The researchers propose that burnout may be mitigated if the employees make an expectation shift from dependence on client progress to personal accomplishment. Alternatively, employees may change career orientations or leave the organisation in an effort to avoid the negative effects of values conflict and burnout (Pick & Leiter, 1991: 44).

Leiter and Maslach (2004: 98-99) define fairness as the degree to which decisions at work are perceived as being fair and people are treated with respect. Unfairness refers to a lack of equity regarding decisions or procedures at work relating to variables such as workload, pay, promotions and dispute resolution. It appears from the literature that people are more concerned with the fairness of the process than

the favourability of the outcome (Leiter & Maslach, 2004: 99; Lawler, 1968; Tyler, 1990: 5). Fairness is instrumental to the reciprocity of equity theory (Walster, Berscheid & Walster, 1973) and the balance of the effort-reward model (Siegrist, 2002). These theoretical frameworks propose that perceptions of equity or inequity are contingent on the balance between inputs and outputs. Previous studies found that a lack of reciprocity or imbalanced social exchange may ultimately cause burnout (e.g. Bakker, Schaufeli, Sixma, Bosveld & Van Dierendonck, 2000: 436-437; Schaufeli, Van Dierendonck & Van Gorp, 1996: 233). White (1987: 200) has identified equality and fairness as variables that are instrumental in administrative leadership. Some researchers argue that employees experience lower risk of burnout and higher acceptance of major organisational change if supervisors are perceived to be fair and supportive (Leiter & Harvie, 1997: 6-7, 1998: 6, 19). The influence that supervisors have over some aspects of employee workload, resources and access to organisational support may explain the relationship between supervisor support, burnout and organisational change. Employees expect management to exercise fairness especially when allocating resources and opportunities in times of major organisational change. Studies on the organisational antecedents of burnout have been limited to date and provide opportunities for future research in order to identify the burnout patterns in the new situational job context (e.g. Cordes & Dougherty, 1993: 631-632; Maslach *et al.*, 2001: 409).

According to Maslach *et al.* (2001: 409) the organisational context operates within a larger external environment where social, cultural and economic forces may have implications for the organisational environment. Globalisation and economic downturns may result in major organisational changes such as restructuring, downsizings, mergers and acquisitions that may ultimately have serious outcomes for employees (e.g. Maslach *et al.*, 2001: 409; Cartwright & Holmes, 2006: 199; Brown & Quick, 2013: 104). Employees may experience a wide range of stressors during a merger including uncertainty, insecurity, communication issues, group differences, workload and income changes (Joshi & Goyal, 2012: 26-28). Mantravadi and Vidyadhar (2008: 66) state that there are many reasons why companies decide to pursue mergers and acquisitions, including greater market share, economies of scale, global reach, improved competition, new synergies and enhanced skills. Previous research has found evidence that external organisational factors such as restructuring and mergers (Jennings, 2008: 6) and recent economic downturns (Brown & Quick, 2013: 104), may contribute to burnout. Mergers and acquisitions may also have an indirect effect on burnout by influencing employee job attitudes such as career progress and expectations that may ultimately lead to burnout (e.g.

Jennings, 2008: 6; Cordes & Dougherty, 1993: 636-637; Visser & Rothmann, 2008: 85).

An important outcome of these external organisational factors is the changing psychological contract between the employer and employee (Rousseau, 1995; Maslach *et al.*, 2001: 409). The psychological contract is the employee's belief that the employer will fulfil perceived promises based on mutual exchange. Employees are no longer satisfied and thus feel that the employment relationship is unfair, because more sacrifice is required in terms of time, effort, skills and flexibility, but less reward is available in terms of career opportunities, life time employment and job security. Bellou (2006: 78) confirms that employee perceptions of organisational obligations and contributions change after a merger or acquisition. Linde and Schalk (2006: 487) argue that mergers may cause an increase in perceptions of violation of the psychological contract, because most of the agreement conditions may be new such as perceived contract, management, colleagues and structures. Previous studies have found evidence that violation of the perceived psychological contract between the employee and employer may contribute to burnout (e.g. Schaufeli & Greenglass, 2001: 503; Pines, 2002: 13). Continuous mergers, downsizings and layoffs at the selected company may contribute to burnout, because employees may associate these events with a failure of the psychological contract and unmet expectations.

2.4.2 Individual factors

Figure 2.1 provides a graphical illustration of the different categories of individual factors that are identified as antecedents of burnout. Individual factors are unique qualities that individuals bring to the work environment and include demographic variables, personality characteristics and job attitudes that may predict burnout (Maslach *et al.*, 2001: 409-411). The literature generally indicates that situational factors are stronger predictors of burnout than individual variables (Maslach & Goldberg, 1998: 65; Maslach *et al.*, 2001: 409). Some of the individual factors, however, may be important antecedents of burnout in the current business environment. This section will expand the discussion on the individual factors of burnout with special emphasis on variables that are more likely to influence the current business environment.

2.4.2.1 Demographic variables

Demographic characteristics as predictors of burnout have received some attention from researchers, but findings from these studies have not been consistent (e.g.

Maslach & Jackson, 1985: 847-850; Cordes & Dougherty, 1993: 633; Maslach *et al.*, 2001: 409-410; Maslach & Leiter, 2008: 499). Maslach *et al.* (2001: 409-410) discuss age, sex, marital status and education as common demographic variables that may be related to burnout. Previous research found that the age variable is the demographic characteristic that is most consistently related to burnout. It is reported that younger employees have higher burnout levels compared to those that are older than 30 years. Age is conflated with work experience and, consequently, some researchers have concluded that burnout is more likely early in the individual's career trajectory. Employees that struggle to cope with the effects of burnout during this early period may leave the company. The researchers propose that older employees in the company are those that could cope better with the initial job stressors and therefore continue to show lower levels of burnout. Ndetei *et al.* (2008: 202) confirm the link between younger age and burnout, but also report an unexpected positive relationship between a greater number of years worked and emotional exhaustion. These findings relating to the age variable should be interpreted with caution because supporting evidence for this notion is still very limited.

Previous research concludes that the sex of an employee is not a major precursor of burnout, because it only accounts for a small variance in the individuals that experienced burnout (e.g. Maslach & Jackson, 1985: 847-848; Maslach *et al.*, 2001: 410). The findings from these studies are mixed with some reporting high burnout for men, some reporting high burnout for women and others showing no significant differences. The data, however, has shown some minor patterns: men consistently scored higher on cynicism and in some studies women scored slightly higher on exhaustion. Contrary to previous studies, Maslach and Jackson (1985: 837, 848) found that women experienced lower levels of burnout compared to men. The results showed that the depersonalisation scores are consistently higher for men than women across occupations. In a sample of telecommunications employees Pretty, McCarthy and Catano (1992: 708) found that men in managerial roles scored higher on emotional exhaustion and depersonalisation than those in non-managerial roles. In contrast, the study found that women in managerial roles scored lower on emotional exhaustion and depersonalisation than those in non-managerial roles. These findings could be related to gender role stereotypes or conflation of sex with occupation and should therefore be interpreted with caution.

Previous studies have confirmed the relationship between marital status and burnout (e.g. Maslach *et al.*, 2001: 410). Findings from these studies show that unmarried individuals appear more likely to experience burnout compared to those that are

married. The data also show that the burnout levels appear to be higher for single individuals compared to those that are divorced. Maslach and Jackson (1985: 837) found that employees that are married or those with children experienced lower levels of burnout compared to those that are unmarried or childless. Ndetei *et al.* (2008: 202) found that the number of children employees have was significantly associated with increased emotional exhaustion. The researchers propose that this unexpected finding may be due to increased financial and emotional responsibilities for individuals with more children.

Some studies have reported a link between the demographic variable education and burnout (e.g. Maslach & Jackson, 1985: 849; Maslach *et al.*, 2001: 410). Results from these studies show that employees with a higher level of education score higher on burnout compared to those with lower education. These findings should be interpreted with caution for two reasons: firstly, education may be conflated with other variables such as occupation and status. Perhaps more educated employees may have jobs that are characterised by greater responsibilities and are therefore more prone to stress. The second reason for caution is that more educated employees may have higher expectations and become more stressed when these are not met. Heyns, Venter, Esterhuyse, Bam and Odendaal (2003: 84) found that neither age, years of experience or level of training affected the level of burnout in a sample of nurses caring for patients with Alzheimer's disease in a South African setting. The results contradicted the findings of Maslach *et al.* (2001: 409-410) which report higher levels of burnout for employees that are younger, have less experience or have higher levels of education. Ethnicity as a demographic variable of burnout was not investigated in the present study. South Africa has only recently emerged from apartheid, a government system that discriminated against citizens based on racial classification. The presence of ethnic classifications in the survey would have increased the risk of fewer responses from participants due to human rights sensitivities. Research on ethnicity as an antecedent of burnout is still very limited and needs to be expanded in order to identify empirical trends for this variable (Maslach *et al.*, 2001: 410).

2.4.2.2 Personality characteristics

Personality characteristics have been investigated extensively as a means to determine which types of people are more susceptible to burnout (e.g. Maslach *et al.*, 2001; Kokkinos, 2007; Alarcon, Eschleman & Bowling, 2009; Ayinde & Taiwo, 2014). Most of these studies found evidence that personality characteristics are related to the dimensions of burnout while some researchers argue against such conclusions

(e.g. Ayinde & Taiwo, 2014: 557). Maslach *et al.* (2001: 410-411) discuss some personality traits including level of hardiness, locus of control, coping styles, neuroticism and personality types. Hardiness describes the level of involvement in daily activities, sense of control over events and openness to change that an individual exhibits. Findings from previous studies demonstrate that people with low levels of hardiness report higher levels of burnout, particularly on the exhaustion scale (Maslach *et al.*, 2001: 410; Alarcon *et al.*, 2009: 257). Furthermore, these studies found that burnout levels are higher for individuals with an external locus of control compared to those with an internal locus of control. Akca and Yaman (2010: 3979) confirmed these findings with reports of significant relationships between external locus of control and the components of burnout. People with an external locus of control attribute events to external influences, powerful others or chance while those with an internal locus of control attribute events to personal ability and effort (Maslach *et al.*, 2001: 410).

The contribution of coping styles in the prediction of burnout has received some attention from researchers with most of the studies reporting lower burnout for people with active confrontational coping styles compared to those with passive defensive coping styles (e.g. Leiter, 1991; Maslach *et al.*, 2001; Gibbons, 2010; Lin *et al.*, 2013). According to Leiter (1991: 141) control coping styles are associated with lower burnout than escapist coping strategies. Gibbons (2010: 1299) concludes that avoidance coping is the strongest predictor of burnout and even infrequent use of such strategies could have a detrimental effect on the burnout experienced by an individual. Previous studies on the big five personality dimensions has found evidence that neuroticism is related to burnout (Maslach *et al.*, 2001: 411; Kokkinos, 2007: 238; Unaldi, Bardakci, Dolas & Arpaci, 2013: 95). Neurotic individuals may experience a wide range of negative emotions, such as emotional instability, psychological distress, anxiety, hostility, depression, self-consciousness and vulnerability (Maslach *et al.*, 2001: 411).

Some studies identified an association between Type A personality and the components of burnout, for example emotional exhaustion (Maslach *et al.*, 2001: 411) and personal accomplishment (Alarcon *et al.*, 2009: 257). Type A behaviour is associated with individuals that are characterised by competition, time urgency, hostility and excessive need for control (Maslach *et al.*, 2001: 411). Furthermore, the report notes that people that are classified as feeling types are more likely to experience burnout than those that are classified as thinking types. According to Jungian theory, people that are feeling types make decisions based on emotions

while thinking types use the intellect. In line with this theory, Schaufeli and Buunk (2003: 404) describe feeling types as individuals better suited to handle emotional demands compared to thinking types that cope better with mental demands. Personality characteristics are individual traits that employees bring to the workplace and may be influenced by various factors relating to organisational change, for example downsizings, mergers and acquisitions. Studies on the relationship between personality variables and major organisational change, however, have been limited to date and provide opportunities for future research.

2.4.2.3 Job attitudes

Petty and Wegener (1998: 323) define attitude as an overall evaluation by an individual of persons, objects and issues. Saarti and Judge (2004: 395) describe employee attitudes as viewpoints that an individual has about aspects of the job, career and organisation. Maslach *et al.* (2001: 411) caution that employee attitudes are sometimes focused on very high job expectations in terms of the nature of work and the likelihood of success. Some employees may expect to do challenging work while others expect good prospects of promotion. It is possible that high expectations could drive people to work too hard and consequently lead to exhaustion. Eventually this exhaustion may lead to cynicism when the hard work fails to yield the expected rewards. Jackson, Schuler and Schwab (1986: 631) differentiate between two types of expectations that may cause burnout namely achievement and organisational expectation. Achievement expectations refer to accomplishments relating to clients whereas organisational expectations refer to the nature of the job and system within the work environment. Furthermore, Jackson and Schuler (1983: 60) speculate that a combination of organisational and personal conditions contribute to burnout. Organisational conditions include lack of clear-cut expectations and job responsibilities whereas personal conditions include idealistic expectations such as rewards for good work.

Previous studies provided some evidence that unmet expectations and shifts in expectations may contribute to burnout (Jackson & Schuler, 1983: 60; Schwab, Jackson & Schuler, 1986: 22; Cordes & Dougherty, 1993: 636-637). Some researchers found evidence that older, more experienced employees are more likely to report lower levels of burnout compared to those that are younger and less experienced. The researchers propose that older employees shift expectations to fit current realities based on experience and consequently report lower levels of burnout. Employees experiencing greater discrepancies between original expectations and current workplace realities report higher levels of burnout (Cordes &

Dougherty, 1993: 633). Schaufeli and Buunk (2003: 396) note that previous studies had overwhelmingly speculated that high or unrealistic expectations are precursors of burnout. Findings from previous research, however, are mixed, and therefore inconclusive, with only half the studies providing support for the high expectation-burnout hypothesis (Schaufeli & Enzmann, 1998: 80; Maslach *et al.*, 2001: 411; Schaufeli & Buunk, 2003: 396). Longitudinal studies on the relationship between expectation and burnout has been very limited to date and provide opportunities for future research. Alarcon (2011: 555) found evidence that organisational attitudes such as job satisfaction, organisational commitment and turnover intention are associated with burnout.

Cordes and Dougherty (1993: 637) speculate that employees benefiting from greater career progress may experience lower levels of burnout due to three possible reasons: firstly repeated promotion may result in less client contact, secondly career advancement may serve as feedback for positive contribution by employees and, finally, employees may perceive that procedures guiding promotion are fair. Visser and Rothmann (2008: 85) found evidence that burnout is associated with multiple aspects of career progress including lack of skill variety, lack of career opportunities, electronic performance monitoring and competing management goals. Despite theoretical merit, the relationship between career progress and burnout has received very little attention from researchers and provides opportunities for future research (Cordes & Dougherty, 1993: 637). Continuous downsizings and layoffs at the selected company may have an indirect effect on burnout by influencing employee job attitudes such as job satisfaction, employee expectations and career advancement that may ultimately lead to higher levels of burnout (e.g. Jennings, 2008: 6).

2.5   Consequences of burnout

Previous studies found evidence that burnout experienced by an individual may also have detrimental consequences for various stakeholders including employees and employers (e.g. Jackson & Schuler, 1983: 68), family, friends, colleagues and clients (e.g. Cordes & Dougherty, 1993: 639-640), service providers and service recipients (e.g. Maslach *et al.*, 1996: 38-39) as well as team and team members (Bakker, Demerouti & Schaufeli, 2003: 13, 25). The researchers have categorised the vast number of potentially negative outcomes of burnout in different ways, for example withdrawal behaviours, interpersonal friction, decreasing job performance, family life issues and health problems (Jackson & Schuler, 1983: 61-62), behavioural, physical, emotional, attitudinal and interpersonal implications (Cordes & Dougherty, 1993: 637-

639), job performance, health problems and psychological well-being (Maslach *et al.*, 1996: 39), job performance and health outcomes (Maslach *et al.*, 2001: 406). After a more recent review of the literature, Schaufeli (2003: 8-9) concluded that the consequences of burnout can be grouped into three categories namely ill-health, negative job attitudes and impaired organisational behaviour. The burnout outcomes mentioned above can generally be grouped into one of these categories. Figure 2.1 provides a graphical illustration of the different categories that are identified as consequences of burnout. Health outcomes, negative job attitudes and impaired organisational behaviour will be discussed in more detail in the next section.

2.5.1 Health outcomes

Previous research on the health implications of burnout was generally grouped into two categories namely physical health consequences (e.g. Mohren, Swaen, Kant, Van Amelsvoort, Borm & Galama, 2003; Salvagioni *et al.*, 2017) and psychological or mental health outcomes (e.g. Maslach *et al.*, 2001: 406). Burnout has many detrimental consequences and may eventually cause health related problems such as insomnia and using alcohol as a coping mechanism (Jackson & Schuler, 1983: 62, 65). Furthermore, the researchers warn that both physical and psychological health may be negatively affected if the work environment is perceived to be uncontrollable and unpredictable. Burnout and its serious outcomes may be avoided by increasing employee participation in decision making and, consequently, increasing employee control over work activities.

At least two Dutch studies have confirmed that high levels of burnout may be harmful to the health of employees. In a study of Dutch dentists, Gorter *et al.* (2000: 261, 263, 265) concluded that burnout is strongly related to poor health. The researchers found that health complaints such as back pain and unhealthy behaviour such as lack of physical exercise were reported to a greater extend by dentists with high burnout risk compared to those with low burnout risk. In a longitudinal study of Dutch employees, Mohren *et al.* (2003: 201, 206-207) found evidence that burnout is a risk factor for common infections; such as common cold, flu-like illnesses and gastroenteritis. Furthermore, the study demonstrated that the exhaustion dimension of burnout is the strongest predictor of these common infections. Previous research also concluded that exhaustion is a stronger predictor of stress related health outcomes than the other two components of burnout (Maslach *et al.*, 2001: 406).This finding supports the notion that exhaustion is considered as the stress component of burnout and as its most typical representation (Maslach, 2001: 609; Maslach *et al.*, 2001: 402-403). In a nationwide study of Finnish employees; Honkonen, Ahola, Pertovaara, Isometa,

Kalimo, Nykyri, Aromaa and Lonnqvist (2006: 59, 63-64) found evidence that physical illnesses are related to all three dimensions of burnout and not only to exhaustion. Additionally, the study demonstrated that the probability of having a physical illness is positively associated with the level of burnout. The researchers found that gender played a role in the type of physical illness that was associated with burnout, namely musculoskeletal diseases among women and cardiovascular diseases among men.

Four South African studies have confirmed that burnout may have detrimental health consequences for employees. In a study among South African primary school educators, Montgomery *et al.* (2005: 270) found that burnout is associated with impaired physical and psychological health outcomes that may have implications for educators as well as other organisational stakeholders. Rothmann and Malan (2006: 1, 13) concluded that occupational stress may cause ill health amongst a sample of engineers in South Africa. The engineers reported lower levels of physical ill health compared to higher levels of psychological health outcomes. Furthermore, the researchers identified work overload as an organisational stressor that may predict both burnout as well as health problems. Rothmann and Essenko (2007: 135, 148) found evidence that burnout is related to physical and psychological ill health consequences in a sample of support staff at a higher education institution in South Africa. Buys and Rothmann (2010: 7-8) concluded that the exhaustion dimension of burnout is associated with somatic symptoms of ill health and depression in a sample of Reformed church ministers in South Africa.

The relationship between burnout and mental health outcomes is more complex and is characterised by conceptual disagreement (Maslach, 2001: 610). Some researchers argue that burnout is a precursor of mental illness. This theory received some support from studies that found evidence that burnout is related to neuroticism and job related neurasthenia (e.g. Maslach *et al.*, 2001: 406; Unaldi *et al.*, 2013: 95). An alternative hypothesis proposes a reverse causal order where less psychologically healthy people are more prone to burnout (Maslach, 2001: 610). Jenkins and Maslach (1994: 101) found some support for this theory in a longitudinal study of employees in interpersonally demanding jobs. The researchers concluded that employees that were psychologically healthier during adolescence and early adulthood were more likely to enter and remain in such jobs. Furthermore, psychologically healthier employees demonstrated greater job involvement and satisfaction. A more common notion suggests that burnout causes mental dysfunction by accelerating or triggering negative mental conditions such as anxiety, depression and low self-esteem (Maslach *et al.*, 2001: 406). Several studies found evidence that

burnout can be differentiated from other mental disorders such as depression and anxiety (e.g. Schaufeli *et al.*, 2001: 578; Schaufeli, 2003: 5). As discussed earlier, continuous layoffs at the selected company due to mergers and acquisitions, may contribute to burnout and, ultimately, lead to detrimental physical or psychological health outcomes for employees.

After a review of the literature, Maslach (2001: 609-611) noted that research on the relationship between burnout and health outcomes is very limited. The author proposes two possible explanations for the lack of interest in this area of research. Firstly, the association between burnout and ill health appears so obvious that researchers may not see the need to gather empirical evidence. Secondly, researchers may not have the required biomedical or methodological expertise to investigate variables related to ill health. This researcher speculates that the commonly accepted notion that burnout causes ill health may be incorrect, because previous research appears to be better equipped to confirm the job outcomes of burnout rather than its health outcomes. Maslach *et al.* (2001: 406) warn that research findings related to health outcomes of burnout must be interpreted with caution, because results are based on self-report measures rather than health indices and also the fact that methodological designs used may be unsuitable for clinical conditions. Furthermore, Schaufeli (2003: 5) cautions that the "healthy worker effect" may inflate results, because burnout studies normally focus only on the healthy employees at work and ignore the employees that are absent due to illness, severe burnout, disability or turnover.

2.5.2 Negative job attitudes

Previous research on burnout generally accepts that job attitudes such as job dissatisfaction and poor organisational commitment may cause burnout (e.g. Lee & Ashforth, 1993b: 14; Alarcon, 2011: 555). Some researchers agree that job satisfaction is associated with burnout, however there is disagreement regarding the direction of causality for these variables (Maslach & Schaufeli, 1993: 11). The authors discuss three possibilities that describe the causality of these variables: firstly job satisfaction may be a precursor to burnout, secondly burnout may be an antecedent of job satisfaction and, finally, a third variable such as poor working conditions may predict both burnout as well as job satisfaction. Several studies confirmed that burnout may lead to indicators for job attitudes such as job dissatisfaction and poor organisational commitment.

In a longitudinal study among school based educators, Wolpin *et al.* (1991: 193) found evidence that burnout is an antecedent rather than an outcome of diminished job satisfaction. According to Maslach *et al.* (2001: 406) burnout is associated with reduced levels of productivity that may ultimately lead to lower job satisfaction and decreased organisational commitment for employees that stay in the current job. Brewer and Clippard (2002: 182-183) reported significant relationships between the dimensions of burnout and total job satisfaction in a sample of student support services personnel. The researchers found that a significant negative relationship existed between emotional exhaustion and job satisfaction as well as a significant positive relationship between personal accomplishment and job satisfaction. After a review of the literature, Schaufeli (2003: 8) concluded that previous studies found cross-sectional evidence that burnout is related to indicators for job attitudes such as job dissatisfaction and poor organisational commitment. Cropanzano, Rupp and Byrne (2003: 166) found evidence that emotional exhaustion predicts organisational commitment and that the relationship between these variables remained significant beyond the influence of demographic variables such as age, gender and ethnicity. Nirel, Goldwag, Feigenberg, Abadi and Halpern (2008: 537, 545) concluded that burnout, work overload and poor health are antecedents of job dissatisfaction in a sample of Israeli paramedics.

Some studies on burnout have identified intervening variables that may influence the relationship between burnout and job attitudes. Ndetei *et al.* (2008: 202) found that despite significant burnout scores amongst the majority of the staff at a Kenyan psychiatric hospital, a high percentage of the respondents reported high job satisfaction, job accomplishment and low interference of family issues. The researchers propose that this unexpected finding is due to hardiness among the staff as a result of high levels of unemployment and poverty in Kenya. High rates of unemployment and poverty in Kenya may stimulate employees to display satisfaction with working conditions and to develop coping mechanisms for burnout. South Africa, itself, is a developing country, characterised by high levels of unemployment and poverty, and, consequently, hardiness may also affect the relationship between burnout and job satisfaction at the selected company. In a study of South African call centre employees, Visser and Rothmann (2008: 84, 86) reported that the relationship between burnout and turnover intention is partially mediated by affective commitment. The researchers found that burnout is negatively related to affective commitment which, in turn, is negatively correlated to turnover intention. Consequently, burnout may lead to turnover intention directly or indirectly via the affective commitment variable. Affective commitment is described as an employee's emotional attachment

to, identification with and involvement in the organisation (Visser & Rothmann, 2008: 81; Allen & Meyer, 1990: 2). Affective commitment is an important variable to consider at the selected company, because it may be influenced directly by mergers and downsizings.

2.5.3 Impaired organisational behaviour

Organisational behaviour is a field of study that seeks to analyse the influence that individuals, groups and structure have on behaviour within an organisation with the objective of improving the performance of the organisation (Robbins *et al.*, 2007: 7). The analysis focuses primarily on employment related aspects, for example absenteeism, productivity, performance, turnover intention, turnover and management. Previous research has concluded that burnout correlates with some of the variables mentioned above (e.g. Jackson & Schuler, 1983; Maslach *et al.*, 2001; Schaufeli, 2003). Jackson and Schuler (1983: 61) caution that employees experiencing burnout may develop withdrawal behaviours in an attempt to avoid the workplace through, for example, late arrivals, early departures, longer breaks and absenteeism. Maslach *et al.* (2001: 406) agree that burnout is related to various forms of job withdrawal such as absenteeism, turnover intention and actual turnover. Schaufeli (2003: 8) concluded from previous studies that burnout is related to indicators of impaired organisational behaviour, for example absenteeism, job turnover and poor performance. The author, however, cautions that the longitudinal evidence to support the relationship between burnout and these negative organisational behaviours are weak and inconsistent.

Many studies have found evidence that burnout and its individual components are related to intention to leave or actual turnover, for example, amongst public welfare professionals (Lee & Ashforth, 1993a: 369), human service supervisors and managers (Lee & Ashforth, 1993b: 3), human service employees (Mor Barak *et al.*, 2001: 625) and Canadian nurses (Leiter & Maslach, 2009: 331). Research that supports this relationship has been conducted recently for occupations other than human and public service professions, for example, amongst American information technology (IT) professionals (Moore, 2000: 158), South African information and communication technology (ICT) employees (Du Plooy & Roodt, 2010: 11), Chinese automobile manufacturing employees (Lin, Jiang & Lam, 2013: 458), Chinese casino employees (Chan, Wan & Kuok, 2015: 345) and American restaurant frontline service employees (Han, Bonn & Cho, 2016: 104). Burnout and turnover intention are the main variables in the present study and further discussion of the relationship between

these variables is important. The relationship between burnout and turnover intention will be discussed in more detail in the last section of this chapter.

Robinson and Bennett (1995: 556, 565) conceptualise employee deviance as voluntary behaviour that violates significant organisational norms and that threatens the wellbeing of the organisation and its stakeholders. Personal aggression is one of four categories of employee deviance and is described as serious interpersonal deviant behaviour such as verbal abuse and endangering colleagues. Previous research has found evidence that burnout is associated with some indicators of personal aggression such as verbal abuse and violent behaviour. In a study of Dutch police officers Kop, Euwema and Schaufeli (1999: 336) found that burnout correlates with the willingness to use violence and the frequency of such behaviour. Ndetei *et al.* (2008: 201-202) found that one third of respondents reported varying degrees of verbal aggression with supervisors, subordinates, co-workers and students in a Kenyan psychiatric hospital. Burnout may be a contributor in the aggression, because the researchers found high levels of burnout in all the staff categories. Dursun and Aytac (2014: 369, 371) demonstrated that customer verbal abuse is positively related to emotional burnout and depersonalisation in a sample of Turkish bank employees.

Organisational behaviour may also be affected when burnout is associated with objective job characteristics such as job autonomy or workload that can be influenced by management. Previous studies have found evidence that burnout is related to job autonomy and workload (e.g. Maslach *et al.*, 2001: 407; Schaufeli, 2003: 7). The researchers confirmed that burnout levels may be reduced by increasing job autonomy and by decreasing the workload of employees. As mentioned earlier, the selected company has a history of downsizings and layoffs that may lead to resource shortages. Managers at the selected company may feel the need to increase employee workloads in order to mitigate resource scarcities and this may, consequently, contribute to burnout. In a study of banking and insurance employees, Bakker *et al.* (2003: 13, 25) found that team burnout is directly related to burnout levels of individual team members. Furthermore, the study demonstrated that team burnout is indirectly related to individual burnout, because of its influence on job demands, job control and perceived social support. Managers at the selected company form part of the various teams in the organisation and may contribute directly or indirectly to burnout as a result of team dynamics.

The impaired organisational outcomes of burnout may have negative implications for a wide range of aspects in the organisation such as productivity, quality of service,

employee sick leave benefits, recruitment costs and training costs. Previous studies have concluded that these negative organisational consequences may lead directly or indirectly to financial losses and loss of market share for the organisation (e.g. Schaufeli, 2003: 6-7; Jackson & Schuler, 1983: 61; Singh, 2000: 15). Jackson and Schuler (1983: 61) caution that burnout may cause a decrease in job performance with employees performing the same quantity of work tasks, but at lower quality. Similarly, Singh (2000: 15) found evidence that frontline service employees experiencing increasing levels of burnout are able to maintain productivity, but not quality of service. This drop in the quality of service may drive customers away and contribute to loss of market share for the organisation. Schaufeli (2003: 6) notes that the use of sick leave benefits may increase if employees become work incapacitated or claim sick leave due to the detrimental outcomes of burnout. Ross, Greenfield and Bennett (1999: 723) found evidence that AIDS volunteers in the highest tertile of depersonalisation scorers were almost thirty three percent more likely to drop out compared to those with lower levels of depersonalisation. Recruitment and training costs may increase when these volunteers that are affected by burnout decide to leave the organisation.

As discussed above, the consequences of burnout are not unique to a particular profession, but are experienced across different occupations, settings and countries. Very few studies, however, have been conducted on the outcomes of burnout in the electronics manufacturing industry in South Africa. Schaufeli (2003: 8) cautions that while most burnout research is based on a cross-sectional approach, only studies using a longitudinal design can uncover the consequences of burnout. Very few longitudinal studies have been conducted on the relationship between burnout and its outcomes, namely ill health, negative job attitudes and impaired organisational behaviour. Longitudinal studies on the consequences of burnout in the electronics manufacturing industry in South Africa provide opportunities for future research. Turnover intention is the dependent variable in the present study and further discussion is important to understand this concept. The next section will discuss the various aspects of turnover intention in more detail.

2.6 The definition of turnover intention and its historical development

Organisations have a vested interest in the prediction of employee turnover intention and can benefit from the vast research that has been conducted on the different aspects of organisational turnover. Key turnover studies have included investigation of its antecedents (e.g. Dougherty, Bluedorn & Keon, 1985; Udo *et al.*, 1997), consequences or costs (e.g. Staw, 1980; Darmon, 1990) and turnover models (e.g.

Martin, 1979; Lee & Mitchell, 1994; Rouse, 2001; Morrel *et al.*, 2001). According to Martin (1979: 313) previous research on organisational turnover concentrated primarily on the causes of employee intentions to stay or leave an organisation. Most of these studies focused predominantly on demographic variables and job satisfaction as predictors of turnover intention.

In an effort to overcome the short comings of previous studies, Martin (1979) proposed an integrated and expanded contextual model for evaluation of employee turnover intention. The model incorporates four structural or process variables, namely upward mobility, distributive justice, communication and routinisation, one environmental variable, namely opportunity, one mediating variable, namely job satisfaction and four demographic variables, namely occupation, age, education and sex. Findings from the study found that turnover intention has a negative association with job satisfaction, upward mobility and age as well as a positive relationship with education (Martin, 1979: 321-322). Furthermore, the results showed that employees with higher occupational status reported higher levels of turnover intention compared to those with lower occupational status. This unexpected finding could be attributed to the confounding influence of pay on occupation and should be interpreted with caution. It is proposed that employees with higher occupational status may desire higher paying jobs and that this may, in turn, lead to higher turnover intention when suitable opportunities become available.

Some researchers have attempted to categorise the vast amount of literature on turnover by differentiating the dominant perspectives of turnover research (Morrell *et al.*, 2001; Rouse, 2001). Morrell *et al.* (2001: 226-227) classify turnover research into two groups, namely the economic or labour market school and the psychological school. Research in the labour market school places emphasis on the relationship between external macro variables and deals with issues such as labour supply and demand, reward and investment, job search and availability of job opportunities. Key studies in this group include research on performance (e.g. McEvoy & Cascio, 1987), perceived alternatives (e.g. Griffeth & Hom, 1988), pay satisfaction (e.g. Lum, Kervin, Clark, Reid & Sirola, 1998) and perceived mobility (Allen & Griffith, 1999). The psychological school highlights employee decision making regarding turnover and deals with issues such as affect, decision, job satisfaction and organisational commitment. Key studies in the psychological school include research on job satisfaction (e.g. Lee, 1988; March & Simon, 1958), psychological contract (e.g. Morrison & Robinson, 1997), dispositional traits (e.g. Chiu & Francesco, 2003) and organisational commitment (e.g. Martin & Roodt, 2008).

As mentioned before, turnover research can be approached from a wide variety of perspectives. Morrell *et al.* (2001: 219), however, conclude that both the economic and psychological schools of turnover research fail to explain or predict turnover adequately. This shortcoming makes it challenging for organisations to manage turnover effectively and calls for new approaches and theories on turnover research. Rouse (2001: 282-286) categorises previous research on voluntary turnover into two groups, namely rational and instinctual models. Rational turnover models follow a linear path that starts with job dissatisfaction and ultimately leads to voluntary turnover. This approach assumes that an employee follows a sequential process of intermediate steps before leaving the organisation. These intermediate steps are influenced by unique antecedents and deals with issues such as job search, job expectations, job attitudes, turnover intentions and available alternatives. Rouse (2001: 282) discusses research conducted by Mobley (1977) and Steers and Mowday (1981) as examples of studies on rational models.

The unfolding model of voluntary turnover proposes an instinctual process towards voluntary turnover (Lee & Mitchell, 1994; Rouse, 2001: 286). According to this instinctual model, shock events, job satisfaction, memory probes, image compatibility and judgements interact to predict one of four distinctive decision paths that may lead to voluntary turnover (Lee & Mitchell, 1994: 51, 60, 73). Each decision path involves distinctive foci, psychological processes and external events. The unfolding model of voluntary turnover assumes that most people leave an organisation because of shock events rather than job dissatisfaction (Rouse, 2001: 286). Decision path 1 of the unfolding model involves intensive instinctual involvement and minimum cognitive effort, however each of the remaining paths become more and more rational with decision path 4 being very similar to rational models. Lee and Mitchell (1994: 60, 75) define a shock to the system as a distinguishable event that jars employees toward deliberate judgements about the job and involves prospects of voluntary turnover. Shocks can be positive, negative or neutral events that stimulate mental deliberations about the job, for example winning the lottery or new job offers. Mergers and downsizings at the selected company are examples of shock events that may increase voluntary turnover at the company. Rouse (2001: 286) describes a shock as any event that jars and forces an employee to interpret and integrate new information into the system of beliefs and images of the individual.

Decision path 1 is initiated by a shock event that is followed by a matching memory probe which then results in automatic script driven behaviour (Lee & Mitchell, 1994:

60-69). Employees on this path may simply quit after minimum mental deliberations because of the automatic and scripted nature of the decision that follows the shock event. Decision paths 2 and 3 are also triggered by shock events and may ultimately lead to a voluntary turnover decision with image compatibility playing an important role in the process. These decision paths are employee controlled and involve moderate to extensive mental deliberations. Unlike decision path 2 where job alternatives are not evaluated, decision path 3 considers specific job alternatives. The trigger point for decision path 4 is not a shock event, but rather feelings related to job satisfaction that may result in a voluntary turnover decision. This decision path is employee controlled and can be sub divided into two paths, namely 4A and 4B. Apart from the starting point, decision paths 4A and 4B correspond to paths 2 and 3 respectively.

Lee and Mitchell (1994: 69-74) advance five unique contributions of the unfolding model to the turnover literature. Firstly, the model proposes a theoretical change by offering an alternative perspective to the traditional approaches to turnover research. Secondly, the turnover process incorporates habits, scripts and schemas through matching frames. Thirdly, shocks to the system are introduced as a means of linking various external, unexpected or random events to the turnover process. Fourthly, multiple sequences leading to employee turnover facilitate more detailed explanation and specification of the model. Finally, the model demonstrates an explicit recognition of the different psychological foci and processes that may lead to employee turnover. Lee *et al*. (1999: 450, 458, 460) found support for a theoretical and quantitative extension of the unfolding model. Modifications to the model resulted in an almost one third improvement in the classification of job leavers. The study demonstrated that different paths unfold at different speeds, for example decision paths initiated by shock events resulted in faster employee turnover compared to those initiated by lower levels of job satisfaction. Further discussion of the unfolding model of voluntary turnover falls beyond the scope of the present study.

Bluedorn (1978: 647-648) defines turnover as a change in the organisational membership status of an individual. The change in membership can be grouped into four categories namely voluntary separations, voluntary accessions, involuntary separations and involuntary accessions. Accessions refer to new employees and separations to those employees leaving the organisation. According to Staw (1980: 253), most previous empirical literature described turnover as a voluntary decision by an employee to leave the organisation. Darmon (1990: 47-48) categorises salespeople turnover into four groups, namely voluntary leaving, dismissals,

promotions and uncontrollable leaving. Shaw *et al.* (1998: 511) differentiate between voluntary and involuntary turnover based on who initiates the turnover decision. Voluntary turnover is defined as an employee driven decision to leave the organisation and involuntary turnover is described as an employer driven decision to end the employment relationship. This classification of turnover based on the origin of the turnover decision is supported by Sutherland and Jordaan (2004: 56). The authors mention that voluntary turnover is normally related to better employment conditions or job satisfaction and involuntary turnover due to retrenchments or dismissals. Continuous retrenchment at the selected company may result in high levels of involuntary turnover.

Johnson *et al.* (2000: 399-400) discuss two perspectives of sales force turnover, namely turnover frequency and turnover functionality. Turnover frequency ignores performance criteria and refers to the number of sales people leaving an organisation. Turnover functionality focuses on the performance of the quitters and can be categorised into high and low performing quitters and stayers. Dysfunctional turnover assumes that good performers leave an organisation or poor performers stay. Functional turnover assumes that poor performers leave an organisation or good performers stay. Furthermore, the researchers found that a number of antecedents of turnover frequency, including intention to quit are good discriminators of turnover functionality. This definition of turnover based on functionality is supported by Sutherland and Jordaan (2004: 57).

Weisberg (1994: 4) describes labour turnover as an inevitable phenomenon in the life cycle of an organisation that involves monetary as well as non-monetary costs, particularly when high performers with valuable human capital leave voluntarily. Kinnear and Sutherland (2000: 106) caution that voluntary turnover of knowledge workers may be especially detrimental to an organisation, because of potential loss of knowledge as well as competitive advantage. The term knowledge worker was originally defined as an employee owning knowledge as a powerful resource that belongs to the employee rather than the organisation (Drucker, 1989). Kinnear and Sutherland (2000: 106) conceptualise knowledge workers as employees with specialist knowledge and who are involved in consultation activities, research and development. According to these definitions, some of the respondents in the present study may be classified as knowledge workers, for example technicians, engineers and managers.

Several researchers argue that turnover intention is a more useful and reliable metric compared to actual turnover data that was obtained from reviewing administrative records (Mitchell *et al.*, 2000: 340). Data obtained from administrative records may be unreliable because documents may be inaccurate, missing or damaged. Mor Barak *et al.* (2001: 629-630) mention two reasons why some studies (e.g. Chiu & Francesco, 2003: 285) use intention to leave rather than, or in addition to, actual turnover. Firstly, intention to leave is a suitable outcome variable, because various turnover studies found support for the commonly accepted notion that turnover intention is a strong predictor of actual turnover (e.g. Lee & Mowday, 1987: 737; Ajzen, 1991: 206; Sutherland & Jordaan, 2004: 56; Tekleab *et al.*, 2005: 153). Secondly, turnover intention is a more practical metric that can be accessed in a cross-sectional study compared to actual turnover that must be evaluated with a longitudinal methodology. Maslach *et al.* (1996: 34) caution against the logistical demands of longitudinal studies. Funding, good relations with the organisation and willingness of the participants are important factors that may influence longitudinal research. The effect of mergers and downsizings on the stability of an organisation may have detrimental consequences for longitudinal studies. Despite the significant relationship between turnover intention and actual turnover, Tett and Meyer (1993: 280) found that turnover intention accounts for only twenty seven percent of the variance in actual turnover. Weisberg (1994: 4) describes turnover intention as a signal of quitting, but cautions that previous research had failed to produce consistent results regarding the value of turnover intention as a predictor of actual turnover. Consequently, some researchers argue against turnover intention as a direct surrogate for actual turnover (e.g. Moore, 2000: 160).

Sager *et al.* (1998: 255) describe turnover cognitions as mental decisions intervening between the job attitudes of an employee and the subsequent decision to stay or leave an organisation. The authors define three turnover cognitions: thinking of quitting, intention to search and intention to quit. Firstly, the employee considers leaving the organisation, next the employee decides to look for employment outside the organisation and finally the employee decides to leave the organisation at some unspecified point in the future. According to Mor Barak *et al.* (2001: 633), intention to leave is generally conceptualised as seriously considering leaving one's current job compared to actual turnover that is defined as leaving one's current job. Brough and Frame (2004: 8) describe turnover intention as an individual's estimated probability to leave an organisation in the near future. Krausz, Koslowsky, Shalom and Elyakim (1995: 277) confirmed that turnover intention can be conceptualised as a process. The researchers found evidence for a progression model of withdrawal intention in a

sample of nurses in Israel. According to this model, nurses first decide to leave the ward, then the hospital and finally the profession. Turnover intention is the dependent variable in the present study and as such remains important to researchers, because it can signal the need for intervention to prevent or reduce turnover in an organisation.

2.7 Measurement of turnover intention

Previous studies have identified many challenges that may affect the measurement of actual turnover in an organisation. Johnston and Futrell (1989: 150-152) caution against metrics that are based solely on turnover frequency which considers the number of employees leaving an organisation, but ignores the performance criteria of the employees. The researchers concluded that turnover frequency overstates the negative effects of turnover, for example when turnover frequency was used as metric, more than half of the turnover rate reported was functional or good for the organisation. The rest of the turnover was dysfunctional and represented high performing employees leaving the organisation. Johnson *et al.* (2000: 401-402) proposed a new measure to evaluate turnover functionality by using four criterion groups, namely poor-performance stayers, high-performance leavers, high-performance stayers and low-performance leavers. This metric is an improvement over approaches that use the Hollenbeck and Williams (1986) method of operationalisation, because it is able to fully differentiate between the different performance groups. The Hollenbeck and Williams (1986) method cannot adequately discriminate between the different criterion groups, because some groups may have identical scores.

As noted before, some researchers concur that turnover intention is a more practical metric compared to actual turnover statistics that depend on reviewing potentially inaccurate and unreliable administrative records (Mitchell *et al.*, 2000: 340). Additionally, turnover intention can be evaluated with a cross sectional methodology thereby avoiding the logistical shortcomings of longitudinal studies which are required in the case of actual turnover (Mor Barak *et al.*, 2001: 630; Maslach *et al.*, 1996: 34). The researchers caution that funding, organisational relations and willingness to participate may have detrimental consequences for longitudinal research. Mergers and downsizings at the selected company may therefore create challenges for the logistical demands of longitudinal studies.

As mentioned before, turnover intention is a suitable substitute for actual turnover, because findings from previous studies have confirmed the significant relationship

between these two variables (e.g. Lee & Mowday, 1987: 737; Tekleab *et al.*, 2005: 153; Hailu *et al.*, 2016: 195). The strength of the relationship, however, is influenced by the specificity of the intention statement and the time interval between measures (Mobley, Griffeth, Hand & Meglino, 1979: 517; Hom, Katerberg & Hulin, 1979: 288; Waters & Roach, 1979: 395). The relationship is stronger when the intention statement is more specific and the measurement of the variables is closer in time. Mobley *et al.* (1979: 517) conclude that impulsive behaviour weakens the relationship between turnover intention and turnover behaviour. Hom *et al.* (1979: 288) caution that the accuracy of predicting turnover will be poor if the event is too distant in time from the assessment of the intention to leave.

Turnover intention was selected as the dependent variable in the present study in order to overcome some of the above mentioned challenges related to the measurement of actual turnover. The current study used a modified version of the metric that was used by Brough and Frame (2004: 10-11) to measure turnover intention. The researchers selected the three item instrument to avoid the shortcomings of a single item metric for turnover intention. Weisberg (1994: 13) speculated that unfavourable or unpleasant situations evaluated as a single global item is likely to be accessed with more severity than phenomena evaluated item by item. Despite this assumption, some researchers have continued to use single item measures in order to evaluate intention to leave (e.g. Kraut, 1975: 237; Udo *et al.*, 1997: 920; Janssen *et al.*, 1999: 1364; Johnson *et al.*, 2000: 405). Many studies, however, use the three-item metric to evaluate turnover intention (e.g. Weisberg, 1994: 6; Lum *et al.*, 1998: 312; Chiu & Francesco, 2003: 289). Brough and Frame (2004: 11) found acceptable inter-item correlations and internal consistency for the three-item metric.

The original questionnaire used three questions on a five-point Likert type scale to evaluate turnover intention of New Zealand police officers. Business functions at the selected company are performed by various occupations, including managers, office workers, production workers, maintenance workers, technicians and engineers. As a result, the wording of the questions was changed slightly to make it more appropriate for the targeted population. All references to the police service were removed from the questions and the period was increased from six months to twelve months on the new questionnaire. The Human Resources manager from the selected company has satisfactorily examined the questions for face validity. Researchers may use similar metrics to evaluate turnover intention, but the number of items, nature of the questions and response scales may vary among studies, for example two item metric

(e.g. Martin, 1979: 318), four item metric (e.g. Moore, 2000: 147), six item metric (e.g. Wegge, van Dick, Fisher, Wecking & Moltzen, 2006: 72), five point response scale (e.g. Udo *et al.*, 1997: 920), and six point response scale (e.g. Janssen *et al.*, 1999: 1364).

2.8   Antecedents of turnover intention

Mor Barak *et al.* (2001: 626) caution against the serious implications for the quality and stability of client services in organisations experiencing high levels of employee turnover. In an effort to reduce turnover rates, organisations must be able to identify and understand the factors causing intention to leave and actual turnover. Due to the significant relationship between intention to leave and actual turnover (e.g. Lee & Mowday, 1987: 737; Mor Barak *et al.*, 2001: 652; Sutherland & Jordaan, 2004: 56), both variables will be included in the discussion of the causes of turnover intention. Mor Barak *et al.* (2001: 625) found that burnout, job dissatisfaction, availability of employment alternatives, low organisational commitment, low professional commitment, stress and lack of social support are the strongest predictors of intention to leave or actual turnover. Some of these precursors are able to clearly differentiate between intention to quit and actual turnover. For example, burnout, job satisfaction, organisational commitment, professional commitment, stress and social support are all significantly better precursors of intention to leave than actual turnover (Mor Barak *et al.*, 2001: 651). It appears from the study that the major causes of turnover are organisational or job related. Consequently, managers and policy makers may be instrumental in reducing turnover rates.

After a review of the literature, Sutherland and Jordaan (2004: 56-57) grouped the antecedents of turnover into three categories: environmental, internal and employee specific factors. Environmental precursors refer to external factors over which an organisation has little or no control. These variables are normally related to labour market issues such as unsolicited approaches (e.g. Lee *et al.*, 1999: 451) and unemployment rate (e.g. Trevor, 2001: 621). Internal antecedents are intrinsic factors over which an organisation has some control such as organisational shock events (e.g. Allen & Griffeth, 1999: 534, 542) and lack of developmental opportunities (e.g. Hay, 2001: 53). Employee specific precursors are associated with the career drivers of an individual such as knowledge worker characteristics (e.g. Kinnear & Sutherland, 2000; Trevor, 2001: 630) and personal shock events, for example winning the lottery (e.g. Holtom *et al.*, 2005: 341). Researchers have classified the antecedents of intention to leave or turnover differently among studies, for example Mor Barak *et al.* (2001: 633-644) proposed three categories, namely demographic variables,

professional perceptions and organisational conditions. Figure 2.2 provides a graphical illustration of the different categories that are identified as antecedents of intention to leave or turnover. Demographic characteristics, professional perceptions and organisational conditions will be discussed in more detail in the next section.
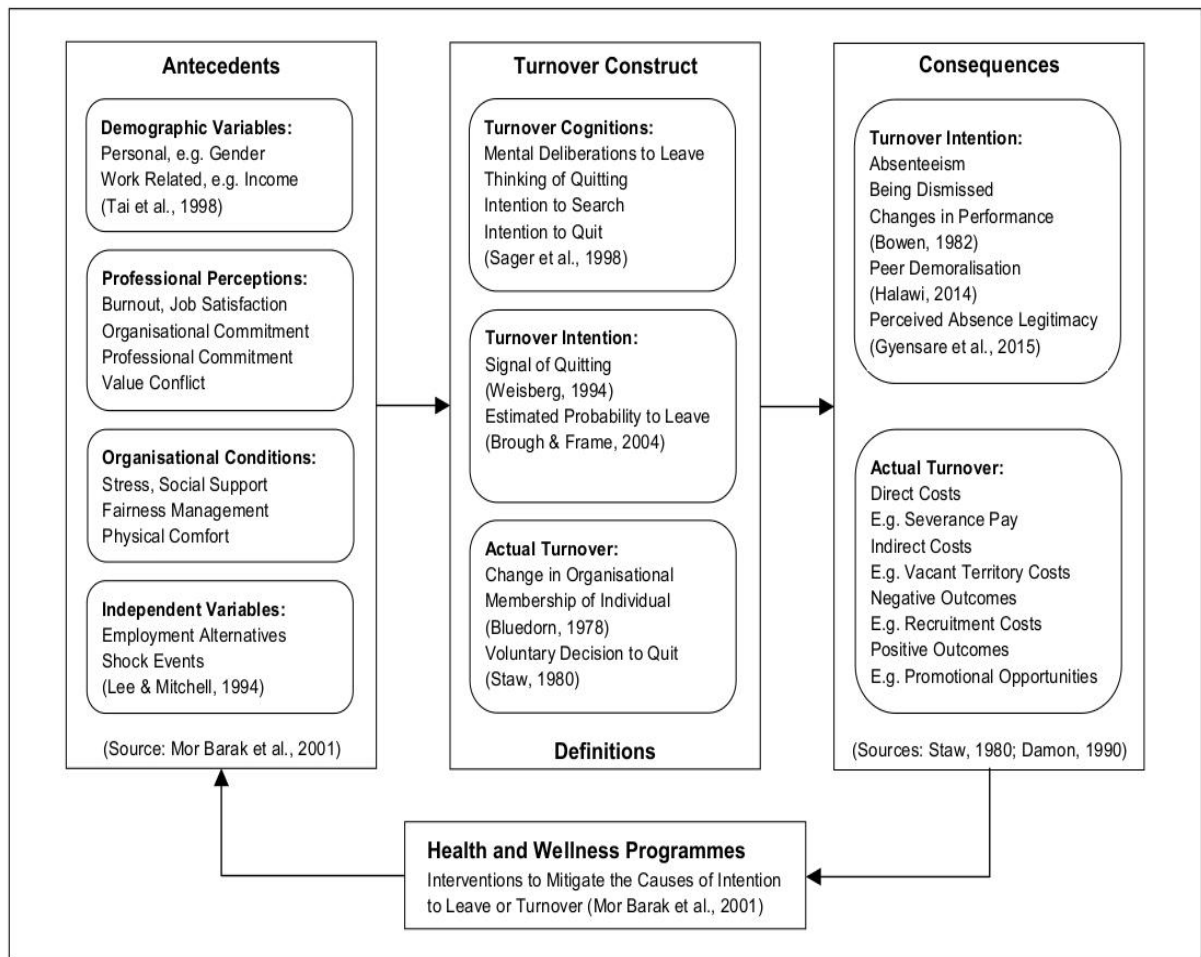
Figure 2.2: Turnover conceptual model

2.8.1   Demographic characteristics

After a review of the literature, Mor Barak *et al.* (2001: 643, 652-653) concluded that all three categories of antecedents mentioned above are statistically significant predictors of intention to leave or turnover, however the correlations between the demographic factors and the outcome variables are weak. Demographic characteristics include a whole range of personal and work related variables that may be associated with intention to leave or actual turnover. Various studies have found evidence that personal demographic factors may predict intention to leave or turnover, for example gender, ethnicity, age, lack of competence, lack of work experience (Mor Barak *et al.*, 2001: 651-654; Martin & Roodt, 2008: 29); dispositional traits (Chiu & Francesco, 2003: 284, 290).

Mor Barak *et al.* (2001: 654) concluded that gender and ethnicity are not significant predictors of intention to leave or actual turnover. One possible explanation is that a victim of such discrimination may develop less job satisfaction, less organisational commitment, more stress and more burnout that may lead to intention to leave and ultimately turnover. The researchers argue that studies that contradict these findings may have failed to consider the mediating effect of these variables on diversity and turnover. Martin and Roodt (2008: 29), however, found evidence that turnover intention is related to gender and race in a South African setting. Findings from the study demonstrated that black women and white men scored higher on the turnover intention scale compared to white women and black men. The researchers argue that the reasons for these unexpected findings are twofold. Firstly, government regulations introduced after the fall of Apartheid in South Africa favours black women in the workplace over other designated groups. Secondly, white men have historically been and may still be the dominant role players in the workplace. Consequently, black women and white men may experience higher levels of turnover intention, because more opportunities may be available to this group.

Mor Barak *et al.* (2001: 654) found evidence that youthful age, lack of work experience and lack of competence are statistically significant predictors of both intention to leave and actual turnover. The researchers propose that these variables may be associated with one another, because younger employees are normally less experienced and less competent. More job opportunities may be available to younger workers due to the perceived advantages of younger age, more flexibility, less responsibility and longer career paths. Older employees may be less attractive to new employers and may not be willing to leave due to the many years invested in the organisation. Consequently, younger workers may be more likely to leave an organisation compared to the older employees. Martin and Roodt (2008: 29) confirmed the significant negative relationship between age of respondents and turnover intention in a sample of employees at a South African tertiary institution. The researchers agree that older employees are not necessarily more qualified and may be less likely to leave due to greater investment in the organisation compared to younger employees.

Chiu and Francesco (2003: 284-285, 290) examined the relationship between dispositional traits and intention to leave in a sample of Chinese managers. Dispositional traits are unique to an individual and may be viewed as personal demographic variables that may contribute to turnover intention. The researchers

define dispositional traits as a framework that an individual uses to appraise and react to situations in a stable way of thinking, feeling and behaving. Negative and positive affectivity are personal attributes that are included under the category of dispositional traits. Positive affectivity is described as a characteristic that reflects widespread individual differences in positive emotionality and self-concept. Negative affectivity is defined as the tendency of an individual to experience a variety of negative emotions across time and situations. The study found that positive affectivity predicts turnover intention and that this relationship is mediated by job satisfaction. No significant relationship was found between negative affectivity and turnover intention. Mor Barak *et al.* (2001: 651) concluded that some demographic characteristics that may influence the dispositional traits of an individual, for example life satisfaction, psychological well-being and negative life events fail to demonstrate statistically significant associations with the outcome variables. Conversely, Cropanzano, James and Konovsky (1993: 595) found evidence that both positive and negative affectivity are related to turnover intentions. The relationships between the variables are mediated by organisational commitment, job satisfaction and affective commitment.

Work-related demographic characteristics are associated with the job and include variables such as education, income and job tenure (Mor Barak *et al.*, 2001: 643). Previous research found evidence that education is related to intention to leave or turnover (e.g. Balfour & Neff, 1993: 482). In a study of child service caseworkers, Balfour and Neff (1993: 482) concluded that education and experience are the primary predictors of turnover intention. Caseworkers having a master's degree and relatively few hours of overtime had the greatest propensity to leave the agency. Similarly, Blankertz and Robinson (1997: 527) found that community mental health workers having a master's degree are more likely to leave the field than others. The researchers argue that workers with master's degrees may have transferable competencies that may be attractive to new employers. Todd and Deery-Schmitt (1996: 365-366) confirmed the relationship between level of education and turnover, especially for employees with midlevel jobs (Mor Barak *et al.*, 2001: 630). The researchers concluded that child care providers with higher education are more likely to leave the job compared to those with limited education or highly specialised skills. Conversely, Ben-Dror (1994: 247) found that education level has a significant negative association with expectancy to leave an organisation and job satisfaction.

Various studies have found evidence that income is related to intention to leave or actual turnover (e.g. Ben-Dror, 1994; Manlove & Guzell, 1997; Tai, Bame & Robinson, 1998; Janssen *et al.*, 1999). In a study of mental health service

employees, Ben-Dror (1994: 252) identified low pay as the primary consideration in the decision to leave the organisation. Similarly, Tai *et al.* (1998: 1921) concluded that higher income is associated with lower intentions to leave or actual turnover. Janssen *et al.* (1999: 1366) found further support that turnover intention is primarily caused by factors associated with unmet career expectations such as higher salary. On the contrary, Manlove and Guzell (1997: 161, 163) did not find evidence of a significant relationship between turnover and wages in a sample of child care workers. The researchers propose two possible explanations for this unexpected finding. Firstly, limited opportunities in the child care profession may force workers to stay in the current job or face the possibility of leaving the profession altogether. Secondly, employees may have fewer available alternative opportunities due to the economic downturn that was experienced at the time of the study.

Previous studies provide consistent evidence of the significant negative relationship between job tenure and intention to leave or actual turnover (e.g. Balfour & Neff, 1993: 480, 482; Ben-Dror, 1994: 252; Blankertz & Robinson, 1997: 522-523; Manlove & Guzell, 1997: 156-157; Tai *et al.*, 1998: 1921). Similarly, Martin and Roodt (2008: 29) confirmed the significant relationship between turnover intention and tenure in a South African tertiary institution. The researchers found that the relationship between the variables can be viewed as an inverted U-shape where intentions to leave increase as tenure increases and then decreases once a peak of six to ten years is reached. Mor Barak *et al.* (2001: 630) propose two explanations for the inverse relationship between turnover and tenure. Firstly, employees with more years of service may not be willing to leave due to the many years invested in the organisation. Secondly, the inverse relationship between the variables may be due to cross sectional selection bias or other research methodological issues. The selected manufacturing company may benefit from these findings by tailoring its developmental opportunities toward plant managers with longer years of service (Udo *et al.*, 1997: 927).

Quantity of leave days (e.g. Brough & Frame, 2004: 8) and work-family variables (e.g. Mor Barak *et al.*, 2001: 654) may also be categorised as work related demographic characteristics. In a study of New Zealand Police Officers, Brough and Frame (2004: 12-13) found that quantity of leave days reported by respondents are negatively associated with job satisfaction and positively associated with turnover intentions. Paid as well as unpaid leave days taken by the police officers over a period of two years were included in the analysis. The researchers agree that leave-taking represent one form of employee withdrawal behaviour, but caution that the

relationships between these variables are weak. Furthermore, the results demonstrated that this withdrawal behaviour is more prevalent among female officers in the New Zealand Police than male officers.

Mor Barak *et al.* (2001: 654) maintain that the vast majority of work-family variables are not significant predictors of intention to leave or actual turnover. However, the authors caution that interpretation of this finding may be distorted due to the limited empirical research available on work-family factors as antecedents of the outcome variables. The researchers propose one exception, namely having children as a work-family variable that is significantly related to turnover intention. Similarly, previous studies found evidence that having children is correlated with lower levels of turnover intention (e.g. Ben-Dror, 1994: 249, 254; Lum *et al.*, 1998: 315). In a more recent study, Choong, Keh, Tan and Tan (2013: 52) demonstrated that marital status is associated with intention to leave in a sample of Malaysian academic staff. The researchers found that turnover intention is higher amongst academic employees that are single compared to those that are married. In an effort to overcome the limitations of a unidirectional approach, Haar (2004: 35) distinguishes between work-family conflict and family-work conflict. Work-family conflict refers to work issues infringing on the family at home, for example taking work home. Family-work conflict refers to home issues invading the workplace, for example dealing with childcare issues at work. The researchers found that higher work-family conflict and family-work conflict cause higher turnover intentions. Furthermore, the results demonstrated that employees are more likely to leave an organisation due to work-family conflict rather than family-work conflict (Haar, 2004: 37).

Mor Barak *et al.* (2001: 655) concluded that the precursors of intention to leave or actual turnover are mostly related to work conditions and organisational culture rather than personal or work-family variables. This finding provides an opportunity for managers and policy makers to mitigate or prevent turnover by implementing suitable interventions. Some interventions may not be sufficient, for example Haar (2004: 38) introduced work-family support programmes with little influence on turnover intention. As noted before, mergers and downsizings at the selected company may have negative consequences for demographic factors related to career expectations such as income. These variables are important in this study, because unmet expectations may be precursors to both burnout and turnover intention. Some of these biographical and job related variables discussed above, for example age, gender and education, were included in the survey questionnaire and will be discussed later in the study.

2.8.2 Professional perceptions

The second category of turnover antecedents that emerges from the literature is classified as professional perceptions and describes the individual-organisational interface. Professional perceptions are grouped into five categories; namely job satisfaction, organisational commitment, professional commitment, value conflict and burnout (Mor Barak *et al.*, 2001: 643, 652). The researchers found evidence that professional perceptions are statistically significant in the prediction of intention to leave and actual turnover. Findings from the study demonstrated that organisational commitment, professional commitment, burnout and job satisfaction are the best predictors of intention to leave. However, the strongest predictors of actual turnover are intention to leave, employment alternatives, job satisfaction and burnout. Stress, social support and management practices are additional variables that may also contribute to intention to leave and turnover.

Job satisfaction has been frequently examined in the turnover literature and is viewed as a key component in the process of turnover (e.g. Martin & Roodt, 2008: 23; Mowday *et al.*, 1979: 244; Mor Barak *et al.*, 2001; Tett & Meyer, 1993). Kallerberg (1977: 126) describes job satisfaction as a unitary concept that refers to an overall affective orientation of an individual towards work roles occupied at present. This definition of job satisfaction as a global construct is supported by various researchers (e.g. Locke, 1976:1300; Chatzoglou, Vraimaki, Komsiou, Polychrou & Diamantidis, 2011: 131). After a review of the literature, Tett and Meyer (1993: 261) conceptualised job satisfaction as an individual's affective attachment to the job. The authors differentiated between global satisfaction that focuses on the job as a whole and facet satisfaction that refers to particular aspects of the job.

Hom *et al.* (1979: 282, 288) evaluated satisfaction with the organisation and five aspects of satisfaction with the job as precursors of intention to reenlist and actual reenlistment. The five aspects included satisfaction with work, satisfaction with promotional opportunities, satisfaction with pay, satisfaction with supervision and satisfaction with co-workers. The researchers concluded that job satisfaction is a better predictor of impulsive and less deliberate withdrawal behaviour than approaches that are based on intention. Blau and Boal (1987: 292-297) introduced a conceptual framework that uses job involvement and organisational commitment to predict absenteeism and turnover. This model suggests that the facets of satisfaction are able to distinguish between four categories of employees and may contribute to different types of turnover behaviour. The researchers propose that certain categories may have multiple facets of job satisfaction that are equally important in the

withdrawal decision while others have a single salient satisfaction facet. Similarly, Futrell and Parasuraman (1984: 37-38) found that the five dimensions of satisfaction are able to differentiate between two performance groups in a pharmaceutical firm. The researchers found that satisfaction with work is the most significant precursor of propensity to leave for low performers. On the contrary, satisfaction with promotion is the only significant predictor of turnover intention for high performers. Furthermore, the researchers demonstrated that job satisfaction has a greater influence on the propensity to leave for low performers compared to high performers. Some studies distinguish between intrinsic and extrinsic dimensions of job satisfaction (e.g. Kallerberg, 1977: 128; Arvey, Bouchard, Segal & Abraham, 1989: 188). Intrinsic satisfaction refers to the aspects of the job that are directly related to the work tasks, for example autonomy, challenge and achievement. Extrinsic satisfaction is associated with elements of the job that are related to facets external to the work tasks, for example working conditions, co-workers and pay. Brough and Frame (2004: 12) found evidence that intrinsic satisfaction is a strong direct predictor of turnover intention in a sample of New Zealand police officers.

Currivan (1999: 496) differentiates between satisfaction, commitment and turnover on the basis of employee attitudes and behaviours. The researcher conceptualises satisfaction and commitment as employee attitudes, whereas turnover is described as employee behaviour. According to Ajzen (1991: 206), attitudes toward the behaviour, subjective norms about the behaviour and perceived control over the behaviour are important antecedents of behavioural intentions that may ultimately lead to actual behaviour. Previous studies found evidence to substantiate this notion that an attitude such as satisfaction may predict intention to leave and actual turnover (e.g. Mor Barak *et al.*, 2001: 652-653). The researchers concluded that job satisfaction is a most suitable and strong predictor of both intention to leave and actual turnover. Similarly, Pienaar *et al.* (2007: 62, 66) found that job satisfaction is the most significant predictor of turnover intention in a sample of employees in a South African mining company. The results demonstrated that job satisfaction has a strong negative association with intention to leave and the effect of role overload on turnover intention is moderated by collegial support. In a study of employees in a South African tertiary institution, Martin and Roodt (2008: 28) found that job satisfaction correlates more strongly than organisational commitment with turnover intentions. This unexpected finding indicates that intention to leave is a rejection of the job rather than the organisation and may be due to the effects of continuously changing job responsibilities in the academic environment.

Organisational commitment is conceptualised as an individual's identification with and loyalty to a particular organisation (Dougherty *et al.*, 1985: 260). Similarly, Udo *et al.* (1997: 917, 920) describe organisational commitment as an affective response to the organisation and the degree of attachment or loyalty of employees toward the organisation. After a review of the literature, Meyer and Allen (1991: 82-83) concluded that organisational commitment is a multi-dimensional construct with three distinct components, namely affective commitment, continuance commitment and normative commitment. Affective commitment refers to the desire of an employee to maintain membership in a particular organisation mostly due to work experiences that create feelings of comfort and personal competence. Continuance commitment refers to the need for an employee to remain in a particular organisation due to the recognition that leaving the organisation has potential costs, for example lack of alternatives. Normative commitment refers to the obligation of an employee to remain in a particular organisation due to internalisation of loyalty norms or receipt of favours that must be repaid to the organisation such as financial support for studies or costs of training.

Mor Barak *et al.* (2001: 652-653) identify organisational commitment as one of the best predictors of turnover intention and caution that the outcome variable may increase if employees are unhappy with the job or organisational commitment is low. Intention to leave may ultimately lead to turnover depending on management practices at the organisation and market conditions such as availability of alternative employment opportunities. The sequencing of satisfaction, commitment and intention to leave in the turnover process has stimulated some debate among researchers. Dougherty *et al.* (1985: 261, 269) compared two models that describe the sequencing of these variables in a path-analytic study. The sequence of variables in the first model starts with job satisfaction which leads to organisational commitment and then, finally, to intention to resign. An alternative model proposes that job satisfaction and organisational commitment are exogenous variables that both lead directly to intention to resign from the organisation. The findings from the study demonstrated that the alternative model provided the best fit for the data.

According to Mowday *et al.* (1979: 226), organisational commitment develops more slowly over time and is more stable than job satisfaction. The researchers propose that daily transitory events in the workplace may immediately affect job satisfaction of an employee, but may not necessarily cause a serious corresponding effect on the organisational commitment of the individual. Tett and Meyer (1993: 279-280) found evidence that both satisfaction and commitment contribute independently to the

turnover process, but the contribution is mostly limited to intention to leave and withdrawal cognitions. The results show that commitment is a weaker precursor of intention to leave and withdrawal cognitions than satisfaction. However, in the case of actual turnover as the outcome variable, the relationship will be reversed. Similarly, Martin and Roodt (2008: 28) found that job satisfaction correlates more strongly with turnover intentions than organisational commitment in a sample of employees in a South African tertiary institution.

Udo *et al.* (1997: 926) concluded that organisational commitment is the most immediate precursor of turnover intention for manufacturing plant managers. The researchers found evidence that job involvement and satisfaction were indirectly related to turnover intention via organisational commitment. Additionally, the results demonstrated that role ambiguity and role conflict are negatively associated with organisational commitment. As mentioned before, downsizings and retrenchments at the selected company may directly influence these role stressors and ultimately contribute to turnover intention. The researchers caution that plant managers are generally engineers that were promoted into managerial roles and that findings for other managers, technical staff and engineers may be different. Similarly, Lum *et al.* (1998: 305, 316-318) found that while organisational commitment is the strongest and most direct determinant of turnover intention, job satisfaction has only an indirect influence on the outcome variable. Furthermore, the researchers concluded that pay satisfaction has a direct as well as an indirect association with turnover intention. The indirect association follows a sequential path where pay satisfaction influences job satisfaction which in turn affects organisational commitment which then ultimately contributes to turnover intention.

As discussed above, Meyer and Allen (1991: 82-83) argue that commitment is a three-dimensional psychological state that include a desire, a need and an obligation on the part of an employee to maintain employment in the organisation. The researchers demonstrated that the likelihood of leaving an organisation is negatively associated with the components of organisational commitment. An employee that experiences an increase in any of the components of organisational commitment will be less likely to leave the organisation. This multi component model of organisational commitment was used by Somers (1995: 55-56) to investigate withdrawal intentions, turnover and absenteeism. The results from the study demonstrated that affective commitment is the most consistent and sole predictor of absenteeism and turnover. Normative commitment was the only other component of commitment that is associated with any of the outcome variables. The researcher observed a significant

negative relationship between normative commitment and withdrawal intentions. No direct relationships were found between continuance commitment and the outcome variables; however an interaction effect with affective commitment indirectly contributed to prediction of absenteeism and withdrawal intentions.

Professional commitment refers to an individual's satisfaction with the profession and include items such as dedication to work, desire to remain in the profession and long term career aspirations (Bartol, 1979: 817; Mor Barak *et al.*, 2001: 643). Bagraim (2003: 6, 8) found support for the multi-dimensional conceptualisation of professional commitment in a sample of South African actuaries. According to this conceptualisation the construct has three components, namely affective professional commitment, continuance professional commitment and normative professional commitment. The researcher found evidence that this multi-dimensional approach to professional commitment is suitable and valuable for evaluating the construct in a South African setting. This three-dimensional definition of professional commitment is based on the model proposed by Meyer, Allen and Smith (1993).

Kinnear and Sutherland (2000: 110-111) found that knowledge workers reject traditional retention factors such as health care, pension and contractual obligation. The researchers demonstrated that the relationship between these variables and the retention of knowledge workers is not significant. However, the authors identified four variables that have the highest influence on organisational commitment of knowledge workers; namely financial reward and recognition, developmental opportunities, freedom to act independently and access to leading edge technology. Sutherland and Jordaan (2004: 55, 60) found support for these findings and proposed an additional retention strategy for knowledge workers in a South African setting, namely greater focus on personal career development. Furthermore, the results demonstrated that job satisfaction and organisational commitment do not predict intention to stay for knowledge workers. The researchers agree with the notion that commitment of knowledge workers should refer to the current job rather than long term loyalty to an organisation (Cappelli, 2000: 108). In particular, the author cautions against the false assumption that commitment can only exists in a long term relationship. As mentioned before, some of the respondents in the present study can be described as knowledge workers such as engineers, technologists and software developers. Consequently, the outcome variables discussed above may also apply to some of the employees at the selected company.

The findings discussed above may be indicative of conflict between organisational commitment and professional commitment of knowledge workers. Participation in decision-making may be viewed as an antecedent of professional commitment that may contribute to the freedom of independence of knowledge workers. In a study of Israeli teachers, Somech and Bogler (2002: 555-556, 559, 569-571) demonstrated that participation in decision-making in the managerial domain is positively related to both organisational commitment and professional commitment. However, in the case of the technical domain, participation in decision-making is positively related only to professional commitment. Most educational researchers concur that the management domain refers to the management and administration of the schools, for example hiring of staff. In the same way, the technical domain refers to the students and instruction, for example classroom discipline policies. Furthermore, the researchers found that organisational commitment was positively associated with the three dimensions of organisational citizenship behaviour, namely students, team and organisation. On the contrary, professional commitment was positively associated with only one of the dimensions of organisational citizenship behaviour, namely students. The researchers describe organisational citizenship behaviour as the consequences of commitment.

In a study of medical technologists, Blau and Lunz (1998: 260, 264) found evidence that sex, age, overall satisfaction and professional commitment are associated with intention to leave the profession. The authors concluded that younger and less satisfied respondents are more likely to leave the profession compared to older employees that are more satisfied. In addition, men reported a higher likelihood to leave the profession compared to women. After controlling for the work-related, personal and external variables, the researchers demonstrated that professional commitment accounts for a significant variance in intention to leave the profession. In a more recent study of hospitality professionals, Walsh and Taylor (2007: 177) investigated some of these variables as job features that may influence the relationship between professional or industry commitment and turnover intention. The researchers found that employees performing challenging work are significantly less likely to leave the industry compared to others. Conversely, the results demonstrated that commitment to learning orientated relationships and commitment to rewards are insignificant and weak precursors of industry turnover intentions.

As mentioned before, values conflict at the workplace refers to the perceived incompatibility between employee and organisational values that can manifest in different ways (Mor Barak *et al.*, 2001: 643; Leiter & Maslach, 2004: 99-100).

Vandenberghe (1999: 175, 182-183) found evidence that values congruence may predict the likelihood of nursing recruits staying with the organisation during the early employment period. The researcher concluded that nursing recruits with value profiles that are compatible with the hospital are more likely to stay with the organisation. Conversely, recruits experiencing conflict between professional and hospital values are more likely to leave the organisation. Some researchers failed to demonstrate a direct relationship between values conflict and intention to leave or turnover, but found evidence that the construct is indirectly associated with the outcome variables. Leiter, Jackson and Shaughnessy (2008: 1, 7) found evidence that nurses from the Generation X cohort reported greater value mismatch compared to those from the Baby Boomers group. The results demonstrated that the higher level of values mismatch experienced by the Generation X cohort is associated with an increased likelihood of burnout and turnover intention for this group. Findings from the study confirm strong correlations between all three components of burnout and turnover intention. Similarly, Leiter and Maslach (2009: 336-337) demonstrated that values congruence contribute to prediction of all three components of burnout which in turn leads to turnover intention. The researchers found that the cynicism dimension of burnout was the key precursor of turnover intention. In contrast to these findings, Mor Barak *et al.* (2001: 651) found that values conflict is not a significant precursor of either intention to leave or actual turnover.

The concept of burnout was discussed earlier in this chapter as an antecedent of intention to leave or actual turnover and will be mentioned only briefly in this section to avoid duplication. Previous studies have indeed found evidence that burnout and its components are related to intention to leave or actual turnover across different occupations, nationalities and settings such as human service occupations (e.g. Lee & Ashford, 1993b: 3), educational occupations (e.g. Goddard & Goddard, 2006: 73), other occupations (e.g. Chan *et al.*, 2015: 345), international settings (e.g. Han *et al.*, 2016: 97), South African settings (e.g. Du Plooy & Roodt, 2010: 1). Burnout is the independent variable in the present study and turnover intention is the dependent variable. Better understanding of the relationship between these variables will be instrumental in evaluating and answering the research questions in this study. The relationship between burnout and turnover intention will be discussed in more detail in the last section of this chapter.

2.8.3 Organisational conditions

Organisational conditions refer generally to individual or group perception of organisational factors, but also include objective organisational characteristics (Mor

Barak *et al*., 2001: 643, 652-653). Perceived organisational factors include elements such as perceived inequity or promotion potential, whereas objective organisational characteristics include attributes such as income or benefits. Organisational conditions are categorised into four groups, namely stress, social support, fairness-management practices and physical comfort. The researchers caution that conflict between organisational conditions and employee professional expectations may have detrimental outcomes for the employees. In particular, high caseloads may encourage employees to keep up with demanding work commitments that may ultimately lead to burnout. Findings from the study confirmed that organisational conditions are statistically significant predictors of intention to leave and turnover. The four categories of organisational conditions that may influence the outcome variables are considered in this section.

Schuler (1980: 189, 212) cautions that researchers have reached little agreement on a common definition or conceptualisation of the stress construct in organisations. The author proposes a definition of stress that considers previous research and conceptualisations as well as different occupational and organisational perspectives of the construct. Stress is conceptualised as a dynamic condition in which an individual experiences opportunity, constraints, demands and uncertainty that ultimately lead to important outcomes. Cordes and Dougherty (1993: 625) caution that the differentiation between burnout and stress has not been clearly described in previous studies, for example some researchers argue that burnout is a type of prolonged occupational stress that results from interpersonal work demands (e.g. Schaufeli & Enzman, 1998: 8). The authors describe occupational stress as any affect-laden negative experience caused by imbalances between the job demands and response capability of an employee.

Rizzo, House and Lirtzman (1970: 151, 154, 162) demonstrated that role conflict and role ambiguity are associated with stress and anxiety respectively. However, the researchers found only a weak correlation between these variables and propensity to leave the organisation. Mor Barak *et al*. (2001: 643) agree that the stress construct includes variables such as role conflict and role ambiguity. Pienaar *et al*. (2007: 62, 63) identified collegial support as an important moderating variable in the relationship between role overload and turnover intention. The study distinguishes two dimensions of role overload, namely quantitative and qualitative role overload. Quantitative role overload is associated with employee perceptions of too much work or insufficient time to perform the assigned tasks (Ivancevich & Matteson, 1980: 113). Qualitative role overload refers to employee perceptions that performance standards

are too high and is normally associated with an inability to complete the assigned tasks. The results showed that quantitative role overload is a stronger precursor of turnover intention than qualitative role overload when the role overload variables are considered alone (Pienaar *et al.*, 2007: 66). Qualitative role overload, however, is a stronger predictor of turnover intention when social support and job satisfaction variables are considered as well.

Various studies have demonstrated correlations between stress or stress related variables and intention to leave or turnover. Deery-Schmitt and Todd (1995) found evidence that turnover is influenced by four stress related components, namely potential stress sources such as working conditions, stress moderators such as coping strategies, cognitive appraisal process outcomes such as role conflict and actions in response to the appraisal outcomes such as withdrawal cognitions (Mor Barak *et al.*, 2001: 628). In a study of mental health workers, Blankertz and Robinson (1997: 522) identified stress as a significant factor that may encourage employees to leave the field. Udo *et al.* (1997: 926) found that stress related variables such as role ambiguity and role conflict are positively related to turnover intention. Mor Barak et el. (2001: 525, 651-653) concluded that stress is one of the strongest and most important precursors of intention to leave and turnover. Furthermore, the researchers concluded that stress is a significantly better determinant of intention to leave than actual turnover. Tuten and Neidermeyer (2004: 32), however, failed to confirm the expected positive relationship between stress and turnover intention in a study of call centre employees. Additionally, the researchers found that optimistic orientation influence job satisfaction and performance, but not turnover intention. Mor Barak *et al.* (2001: 655) suggest that stress is an organisational factor that may be mitigated by implementation of suitable interventions by management.

Social support brings about an employee perception that others are able and willing to provide the necessary resources to deal successfully with the interaction (Cordes & Dougherty, 1993: 648). Lee and Ashforth (1993b: 8) describe social support as expressive and instrumental support received from an individual's immediate supervisor and organisation. Social support may come from various sources, such as co-workers, supervisors, managers, organisation, friends or family (e.g. Leiter & Durup, 1996: 34; Mor Barak *et al.*, 2001: 643; Eisenberger, Stinglhamber, Vandenberghe, Sucharski & Rhoades, 2002; Brough & Frame, 2004: 8). The present study will only consider the sources of social support within the organisation. Further discussion of personal sources of support falls beyond the scope of this study and provide opportunities for future research.

Previous studies conducted across different occupational and organisational settings found that social support is associated with intention to leave and turnover. In a study of New Zealand police officers, Brough and Frame (2004: 8, 12) demonstrated that supervisor support is an indirect precursor of intention to leave via the intrinsic job satisfaction variable. Ito and Brotheridge (2005: 14) found that supervisory career support such as information, advice and encouragement is associated with intention to leave the organisation in a sample of Canadian civil workers. Pienaar *et al.* (2007: 64, 66) found evidence that collegial support has a significant moderating effect on the relationship between qualitative role overload and turnover intention in a South African gold mining company. The researchers suggest that unlike colleagues, supervisors may directly contribute to increased work demands that may ultimately affect role overload. Additionally, colleagues may be more likely to reduce qualitative role overload by providing co-workers directly with knowledge or advice that may assist with work activities. Leiter and Maslach (2009: 338) caution that the quality of collegial relationships may be instrumental in the turnover decisions of nurses with the greatest likelihood of change.

Eisenberger, Huntington, Hutchison and Sowa (1986: 501) propose that perceived organisational support is based on employees developing global beliefs concerning the extent to which an organisation values their contributions and cares about their well-being in order to determine the readiness of the personified organisation to praise, approve and reward increased work effort. More recent studies also accept this conceptualisation of perceived organisational support (e.g. Rhoades & Eisenberger, 2002: 711-712; Dawley, Houghton & Bucklew, 2010: 239). Rhoades and Eisenberger (2002: 711-712) found evidence that supervisor support is an employee beneficial treatment variable associated with perceived organisational support. Furthermore, the results demonstrated that perceived organisational support is associated with employee favourable outcomes, such as job satisfaction as well as organisation favourable outcomes, such as reduced withdrawal behaviour. Similarly, Eisenberger *et al.* (2002: 570) found evidence that perceived supervisor support, based on the organisational status of the supervisor, predicts perceived organisational support that ultimately leads to reduced turnover.

Dawley *et al.* (2010: 252) found evidence that perceived supervisor support is a precursor of perceived organisational support in a sample of manufacturing employees. The results demonstrated that job fit mediates the relationship between perceived supervisor support and perceived organisational support. Job fit is

described as an employee perception of compatibility or comfort within the organisational environment (Mitchell, Holtom, Lee, Sablynski & Erez, 2001: 1104; Dawley *et al.*, 2010: 240). Furthermore, Dawley *et al.* (2010: 252) found that perceived organisational support is a predictor of turnover intention. The results demonstrated that personal sacrifice mediates the relationship between perceived organisational support and turnover intention. Personal sacrifice is defined as the perceived cost of material or psychological benefits that may be forfeited upon leaving a job (Mitchell *et al.*, 2001: 1105; Dawley *et al.*, 2010: 240).

In a study of municipal employees, Kivimaki, Vahtera, Pentti and Ferrie (2000: 971) concluded that organisational downsizing affects social relationships such as colleague and supervisor support. Similarly, Shah (2000: 101, 104) cautions against the implications of downsizings, in particular the disruption of existing social networks. In a study of employees in a consumer electronics company, the researcher found that loss of friends caused a negative reaction that weakened survivors' network centrality whereas loss of co-workers in similar structural positions resulted in a positive reaction that increased satisfaction with promotional opportunities. The results demonstrated that advice networks, particularly with supervisors, may be regenerated six months after the layoffs, but this period is not sufficient to restore friendship networks (Shah, 2000: 110). As mentioned before, the selected company in the present study has a history of downsizings and may experience similar outcomes.

As defined earlier in the chapter, fairness refers to mutual respect between individuals and equity relating to decisions at work (Leiter & Maslach, 2004: 98-99). The construct also include impartial implementation of work policies such as workload, reward, promotion and conflict resolution. Most of the research on fairness-management practices has been done under the concept of organisational justice (Weaver & Trevino, 2001: 117). Previous studies describe organisational justice as a multi-dimensional concept that includes procedural, distributive and interactional justice (e.g. Greenberg, 1990a; Cropanzano, Byrne, Bobocel & Rupp, 2001: 165; Charash & Spector, 2001; Nadiri & Tanova, 2010; Karatepe & Shahriari, 2014). Cropanzano *et al.* (2001: 165) refer to procedural justice as the perceived fairness of process elements in an organisation. Distributive justice is described as the perceived fairness of organisational outcomes or allocations, whereas interactional justice is defined as the fairness of interpersonal interactions in an organisation.

Hendrix *et al.* (1998: 624-626) suggest that perceptions of positive organisational justice will result in employees with higher levels of intrinsic job satisfaction and commitment. As a result, the employees will have a strong desire to attend work, perform well within a group and remain in the organisation. Literature on organisational justice has produced conflicting results regarding the relationship between turnover intention and the different dimensions of organisational justice. Previous studies concluded that employees are more concerned with the fairness of the process than the favourability of the outcome (e.g. Lawler, 1968; Tyler, 1990: 5; Leiter & Maslach, 2004: 99). In a meta-analysis of the literature on organisational justice, Charash and Spector (2001: 307) confirmed that both procedural justice and distributive justice are predictors of turnover intention. The results showed that interactional justice has similar, but weaker associations with turnover intention compared to the other components of organisational justice.

Nadiri and Tanova (2010: 39) found evidence that procedural justice is associated with job satisfaction and turnover intention in a sample of hotel employees. The results demonstrated similar, but stronger associations for distributive and interactional justice compared to procedural justice. Findings from the study suggest that fairness of actual reward received influences turnover intention of employees more than fairness of the reward allocation procedures. In a more recent study of public and private sector employees, Gim and Desa (2014: 491) found that both distributive and procedural justice are significantly and positively related to affective commitment that, in turn, is significantly and negatively related to turnover intention. The results demonstrated that fairness of compensation and fairness of reward allocation procedures encourage affective commitment and reduces the propensity of employees to leave the organisation.

Fairness is a variable that may be influenced by management or organisational policies and may have implications for turnover. Karatepe and Shahriari (2014: 30) caution that managers must ensure that employees perceive fairness regarding allocation of rewards, decision making processes, quality of interaction and quality of information. Failure by management to exercise these fairness practices may encourage employees to leave the organisation. Employees expect management to exercise fairness especially when allocating resources and opportunities in times of major organisational change (Leiter & Harvie, 1997, 1998). The researchers demonstrated that employees report higher acceptance of major organisational change when supervisors are perceived to be fair and supportive. As mentioned before, the selected company has experienced major organisational change and may

encounter similar outcomes related to fairness. Further discussion of fairness falls beyond the scope of the present study and provides opportunities for future research.

Vischer (2007: 23-25) describes comfort as environmental support that links the psychological aspects of environmental satisfaction with outcomes such as improved task performance and organisational productivity. The author conceptualises environmental comfort as a hierarchical construct that includes three levels of comfort; namely physical, functional and psychological comfort. Literature on comfort most commonly refers to physical comfort and its importance in satisfying the basic human needs in the workplace. Physical comfort is described as a necessary condition for building habitability and focuses on compliance with building regulations as well as health and safety standards. Implementation of health and safety regulations in the workplace may avoid undue stress by eliminating extreme environmental conditions such as too much heat or noise. Functional comfort refers to the generic human requirements for tools to perform specific tasks. Workspace is viewed as a tool for getting work done, such that good design and management of the workspace may improve employee performance. Psychological comfort refers to the association of psychosocial elements such as job demands, rewards and recognition with environmental design and management of the workspace through the concepts of territoriality, privacy and control. This peak level of psychological comfort is most likely to produce optimal environmental quality in an organisation when resources are invested in all three levels of comfort.

Previous research found evidence that environmental comfort is related to intention to leave and actual turnover (e.g. Mor Barak *et al.*, 2001: 651; Feige, Wallbaum, Janser & Windlinger, 2013: 29). Lueder (1983: 709) cautions that the relationship between improved work station design and employee turnover is problematic. The author suggests that management style may be more significantly related to turnover than furniture acquisitions that complement that style. After a review of the literature, Mor Barak *et al.* (2001: 651) found that physical comfort is a significantly better predictor of intention to leave an organisation than actual turnover. Low levels of physical, functional or psychological comfort may contribute to higher levels of job strain that may ultimately lead to health problems, absenteeism and employee turnover (Vischer, 2007: 27). Feige *et al.* (2013: 29) accept the three-dimensional conceptualisation of comfort as defined by Vischer (2007) and highlight that improvements in user comfort will have corresponding outcomes for all stakeholders. The researchers found evidence that user comfort is associated with work engagement which then demonstrates that high user comfort can reduce employee

turnover. Conversely, Sutherland and Jordaan (2004: 60) concluded that the retention of knowledge workers is not determined by factors relating to personal comfort such as physical office environment. Further discussion of environmental comfort falls beyond the scope of this study and provides opportunities for future research.

Some of the antecedents of turnover such as perceived employment alternatives and intention to leave do not fit into the three-category structure proposed by Mor Barak *et al.* (2001: 644) and are considered independently. Perceived employment alternatives are identified repeatedly in the literature as predictors of intention to leave and actual turnover. Despite being an outcome variable, intention to leave is frequently identified in the literature as a predictor of actual turnover. These variables have been discussed earlier in the chapter and are only mentioned briefly to avoid duplication. Shocks may be categorised as independent antecedents of intention to leave and turnover, because precipitating events may originate from demographic characteristics, professional perceptions or organisational conditions. As defined before, a shock refers to a distinguishable event that jars employees to deliberately make judgements about the job and to voluntarily leave the organisation (Lee & Mitchell, 1994: 60).

Allen and Griffeth (1999: 543) argue that performance may lead to turnover via three different paths, namely mental and emotional evaluations of the desire to leave, perceived or actual job mobility in the market and performance related shock events. Holtom *et al.* (2005: 345) found that shock events rather than job dissatisfaction are more often the immediate precursors of voluntary turnover. An interesting result from the study revealed that a significant percentage of the respondents reported mergers or acquisitions as the precipitating event that prompted turnover. Similarly, Martin and Roodt (2008: 23) caution that restructuring has several negative effects for an organisation, including absenteeism and turnover. Armstrong-Stassen, Cameron, Mantler and Horsburgh (2001: 158) found evidence that mergers and acquisitions are associated with organisational commitment, job satisfaction and turnover intentions. These findings are significant to the present study due to the history of mergers and downsizings at the selected company.

2.9   Consequences of turnover intention

Weisberg (1994: 4) acknowledges that labour turnover cannot be avoided by organisations and has monetary as well as non-monetary costs. These costs are significant, especially when experienced employees leave the organisation voluntarily. Consequently, organisations have a vested interest in early prediction of

turnover intention. While turnover intention is the dependent variable, its outcomes are not central to the present study and will therefore only be discussed briefly in this chapter. The next section will start with a discussion of the direct relationship between intention to leave and actual turnover. An overview of the consequences of turnover intention other than actual turnover will follow, to enhance the debate. For the sake of completeness, the section will be concluded with a discussion of the consequences of actual turnover. Figure 2.2 provides a graphical illustration of the different categories of outcome variables that are associated with intention to leave and actual turnover.

2.9.1 Actual turnover as a consequence of turnover intention

As noted before, many studies found evidence that turnover intention is a significant and strong predictor of actual turnover (e.g. Lee & Mowday, 1987: 737; Ajzen, 1991: 206; Sutherland & Jordaan, 2004: 56; Tekleab *et al.*, 2005: 153; Mor Barak *et al.*, 2001: 652). Some researchers caution that the relationship between intention to leave and actual turnover may be weakened by certain variables, for example impulsive behaviour (Mobley *et al.*, 1979: 517) and too distant time intervals between measures (Hom *et al.*, 1979: 288). Similarly, Mor Barak *et al.* (2001: 652) agree that intention to leave is the strongest predictor of actual turnover, but caution that other variables such as employment alternatives and management practices may also influence the actual turnover decision. Support for the commonly accepted notion that intention to leave is a significant and strong determinant of actual turnover, has prompted some researchers to substitute or combine actual turnover with turnover intention as the outcome variable (e.g. Chiu & Francesco, 2003: 285).

2.9.2 Other consequences of turnover intention

Krishnan and Singh (2010: 423) caution that outcomes of turnover intention other than actual turnover have received very limited attention in the literature. As an exception, Bowen (1982: 210) investigated and proposed some unintended consequences of turnover intention, namely absenteeism, being fired and changes in job performance. The author suggested that future studies should include other unintended consequences of turnover intention such as alcoholism, heightened search activity and decreased self-confidence to enhance understanding of the withdrawal process of employees that intend to leave, but do not. Krishnan and Singh (2010: 431-434) found evidence that the consequences of intention to quit are harmful to multiple stakeholders, including employees, organisations and customers. The results demonstrated that higher intention to quit precipitates less performance orientation, higher organisational deviance and fewer organisational citizenship behaviours. Furthermore, the researchers identified performance orientation as a

mediating variable that influences the relationships between intention to quit and the outcome variables. Performance orientation refers to the effort exerted by an employee to project good performance, motivation to achieve, and completion of the job in the best possible way and time. Organisational citizenship behaviour refers to the actions that are beyond the expected task performance of an employee, bearing in mind that detachment from the organisation may lead to withdrawal from those actions. Robinson and Bennett (1995: 556) describe organisational deviance as voluntary behaviour that violates significant organisational norms and as a result threatens the well-being of the organisation (Krishnan & Singh, 2010: 424).

Halawi (2014: 191) concluded that intention to leave has a direct negative correlation with performance and may contribute to demoralisation in the organisation by spoiling the positivity of employees. The author proposes that organisations can mitigate peer demoralisation by encouraging dissatisfied employees to quit. Alternatively, organisations may introduce satisfiers or commitment boosters to improve the performance of employees. In a study of Ghanaian retail bankers, Gyensare, Otoo, Asare and Twumasi (2015: 792) found evidence that accountable absence legitimacy is an outcome of employee turnover intention. The researchers argue that employees that decide to quit the organisation may demonstrate the intention to leave through increased absenteeism which may lead to perceived absence legitimacy without accountability. Consequently, reducing turnover intention of employees may result in lower absenteeism and improved accountability for perceived absence legitimacy.

2.9.3 Consequences of actual turnover

Staw (1980: 255-265) proposes that turnover has positive as well as negative consequences which may have related costs or benefits for the affected organisation. Although the positive aspects of turnover may be less quantifiable and attainable over the short term, these benefits may contribute to the long term viability of the organisation. The author lists four negative consequences that are related to turnover, namely selection and recruitment costs to replace departing employees, training and development costs for new employees, operational disruption and demoralisation of organisational membership. Similarly, the author discusses five positive consequences of turnover, namely increased performance, reduction of entrenched conflict, increased mobility and morale, innovation and adaptation. Furthermore, the study recommends several intervening variables that may have a moderating influence on the outcomes of turnover, for example, level and complexity of the job, tightness of the labour market and inside versus outside succession strategies.

Johston and Futrell (1989: 150, 153) suggest that turnover functionality rather than frequency is more useful in interpreting the consequences of turnover. The authors evaluated voluntary turnover on the basis of functionality and proposed that turnover is not inherently bad, but may also have good outcomes for organisations. Dysfunctional turnover refers to good performers leaving the organisation and being replaced by less capable employees, whereas functional turnover refers to poor performers leaving the organisation and being replaced by more capable employees. In a study of sales people, Darmon (1990: 48) suggests that turnover has direct as well as indirect consequences which have related costs for the affected organisation. The author lists six costs that are related to turnover of sales people, namely separation costs such as severance pay, recruitment and selection costs to replace departing employees, training costs to develop new employees, vacant territory costs due to drop of service in the sales territory, differential skill costs such as discrepancies in skill and competence of new employees impacting sales and differential operating costs such as discrepancies in income and supervisor support impacting operational expenditure. The selected company in the present study is not spared from the outcome variables discussed above and may also experience the costs and benefits of turnover. Further discussion of the consequences of turnover intention falls beyond the scope of this study and provide opportunities for future research.

2.10 The relationship between burnout and turnover intention

Manlove (1993: 500) cautions that burnout may have serious consequences for clients whether the affected employees stay in the organisation or leave. Employees that suffer from burnout, but decide to stay may not be able to perform optimally and as a result contribute negatively to the quality of care to clients. After a review of the literature, Maslach *et al.* (2001: 406) concluded that burnout is associated with various forms of job withdrawal including intention to leave and actual turnover. The authors caution that employees intending to leave the organisation, but then don't, may have detrimental consequences for the employer as well as employees such as personal conflict and lower productivity. Similarly, Schaufeli (2003: 6) cautions that burnout is detrimental for the individual as well as the organisation since it can lead to several negative consequences such as absenteeism, job turnover, poor performance and loss of productivity. The author concluded that the correlation between burnout and intention to leave is relatively strong compared to the relationship between burnout and actual turnover that is much weaker.

Organisations have a vested interest in early prediction of turnover, because the potential costs related to the negative outcomes of burnout may be significant. The relationship between burnout and turnover intention is central to the present study and will be discussed in more detail in the rest of this chapter. In the following sections an overview is presented in order to enhance the discussion on the relationship between burnout and turnover intention in the human services and education professions as well as in occupations not related to these fields. The final section briefly considers the important role of interventions in mitigating the detrimental consequences of burnout. As mentioned before, for the sake of completeness and due to the direct relationship between intention to leave and actual turnover, both outcome variables will be included in the discussion. Figure 2.3 provides a graphical illustration of the interaction between predictor and outcome variables across different occupational groups.
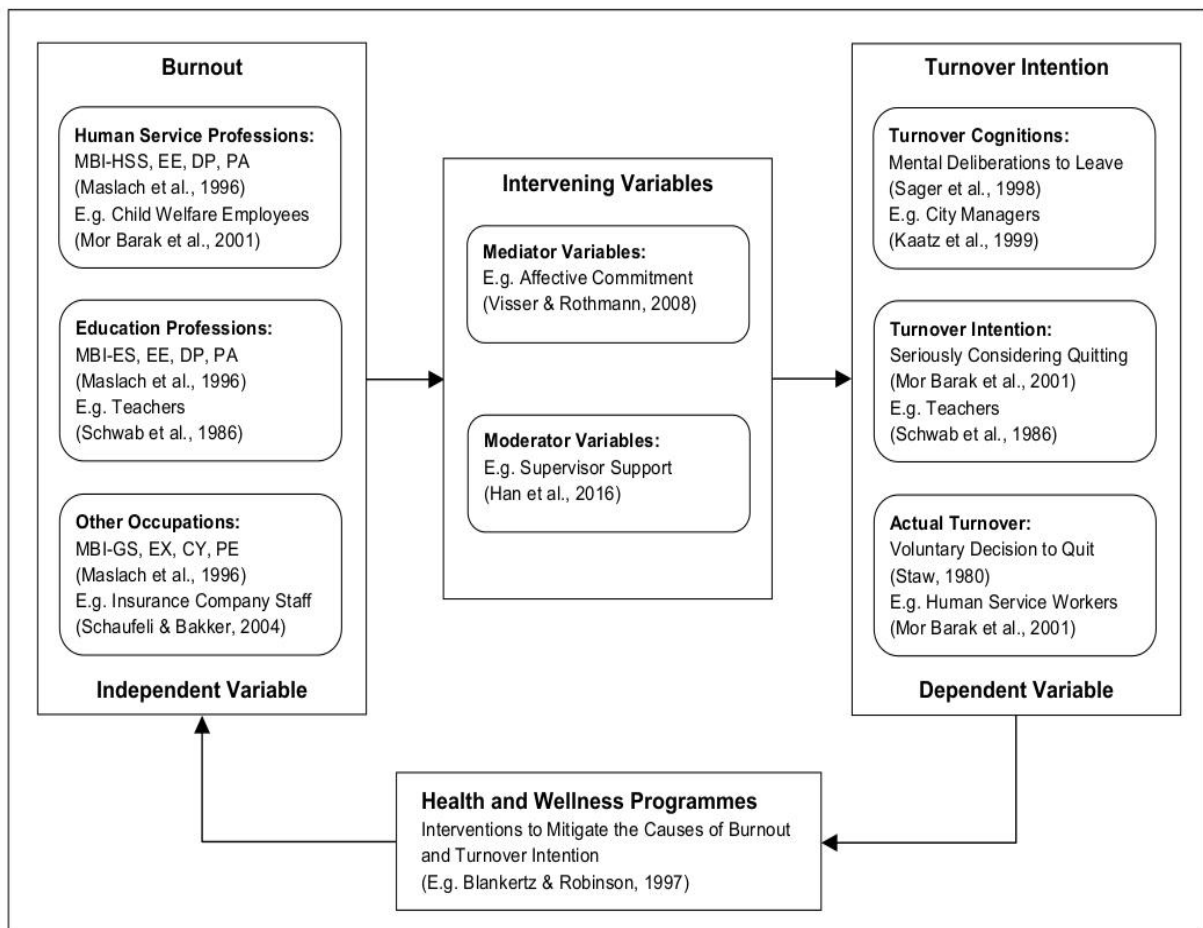
Figure 2.3: Relationship between burnout and turnover intention

2.10.1 Burnout and turnover intention in the human service professions

Many studies have found evidence that burnout and its individual components are related to intention to leave or actual turnover in the human services professions (e.g. Maslach & Jackson, 1985; Blankertz & Robinson, 1997; Mor Barak *et al.*, 2001; Scanlan & Still, 2013; Kim, 2016: 21; Elci *et al.*, 2018: 57). After a review of the literature, Mor Barak *et al.* (2001: 652-653) concluded that burnout is one of the best predictors of turnover intention as well as one of the strongest determinants of actual turnover in the human services professions, but not in most other professions. In most other professions job performance and absenteeism are important predictors of turnover intention and actual turnover. The authors suggest that employees in the human services professions operate in an emotionally intense environment and must balance conflicting organisational conditions and professional expectations. Due to the nature of the work, these employees are more likely to experience burnout and, ultimately, turnover than employees in most other professions. The current section will discuss some of the literature on the relationship between burnout and turnover intention or actual turnover in the human service professions across different settings and nationalities.

Maslach and Jackson (1985: 838, 846-847) caution that burnout may be viewed as a serious social problem due to its potential association with absenteeism, poor job performance, turnover and personal dysfunction. In a study of public contact employees, the researchers showed that higher scores on all the dimensions of burnout are significantly correlated with the desire to spend less time working with the public and intention to quit the job. Furthermore, men reported stronger intentions to leave the job and to spend less time working with the public, compared to women. Scanlan and Still (2013: 311, 315) found evidence that burnout is associated with lower job satisfaction and higher turnover intention in a sample of Australian occupational therapists. The researchers conceptualise burnout as a multi-dimensional construct with two components namely, disengagement and exhaustion.

Many studies evaluating the relationship between burnout and turnover intention identify emotional exhaustion as the predominant dimension of the predictor variable. In a study of human service professionals, Lee and Ashforth (1993a: 388, 390-391; 1993b: 14-15) found evidence that emotional exhaustion has a direct influence on turnover intention. The researchers suggest that emotional exhaustion can stimulate an employee to reconsider the current job and can ultimately lead to actual turnover. In a study of community mental health workers in the Psychosocial Rehabilitation Services (PSR) field, Blankertz and Robinson (1997: 523) found evidence that

emotional exhaustion and depersonalisation have positive significant correlations with intention to leave the field. Furthermore, the results showed that personal accomplishment has a negative significant correlation with intention to leave the PSR field. Respondents that reported higher levels of emotional exhaustion and depersonalisation as well as lower levels of personal accomplishment were more likely to leave the PSR field.

In a study of American child care employees, Manlove and Guzell (1997: 153, 156) found evidence that the emotional exhaustion dimension of burnout is significantly associated with turnover intention. The results showed that employees most likely to leave the job have perceived job alternatives and report higher levels of emotional exhaustion compared to others. Similarly, Cropanzano *et al.* (2003: 166) demonstrated that emotional exhaustion predicts turnover intention in a sample of American hospital employees. Zhang and Feng (2011: 7-8, 12) found evidence that several dimensions of job satisfaction and burnout influence the turnover intention of Chinese physicians. The job satisfaction variables that are significant direct predictors of turnover intention relate to work environment, job reward and organisational management. Although each component of burnout is positively related to turnover intention, emotional exhaustion has the highest correlation with the outcome variable followed by depersonalisation and then reduced personal accomplishment. Furthermore, the results showed that burnout, mostly via the emotional exhaustion dimension, partially mediated the relationship between job satisfaction and turnover intention. Similarly, Kubayi (2018: 4) found evidence that the levels of emotional exhaustion experienced by South African sport coaches are more strongly associated with turnover intention than depersonalisation and personal accomplishment.

Firth and Britton (1989: 56, 58) found evidence that some burnout variables are significant predictors of sickness and turnover in a sample of qualified nurses. Furthermore, the results demonstrated that depersonalisation towards the client or others moderately predicted job turnover in the subsequent two years, but no significant relationship was observed for the other components of burnout. The authors caution that MBI depersonalisation items refer to detachment or hardening towards others and may not necessarily relate to actual turnover behaviour of employees. In a more recent study of Canadian nurses, Leiter and Maslach (2009: 336-337) confirmed the link between detachment from others and turnover intention. The researchers found evidence that unmanageable workload, value conflicts and inadequate rewards are critical workplace factors that predict burnout and ultimately lead to turnover intention. Furthermore, the results demonstrated that cynicism is the

only component of burnout that was identified as a clear predictor of turnover intention. The researchers propose that the direct link between reward and cynicism may provide an explanation for this unexpected finding. Alternatively, the finding may be related to the use of the MBI-GS as the burnout metric rather than the MBI-HSS that is designed for the human service professions.

Krausz *et al.* (1995: 277, 285-286) describe withdrawal intention in terms of a progression model that starts with nurses deciding to leave the ward, then the hospital and finally the profession. In a study of Israeli nurses, the researchers demonstrated that burnout as a determinant of turnover intention significantly predicts only intention to leave the hospital, but not the ward or profession. This suggests that nurses most likely to leave the hospital perceive the job as offering little challenge, autonomy or opportunity and are experiencing high levels of burnout. Furthermore, burnout is identified as a psychological response that weakly predicts the intention of nurses to leave the profession. Manlove and Guzell (1997: 162) found evidence that burnout is related to intention to leave the job, but not to actual turnover in the subsequent twelve months. The researchers propose that this unexpected finding is an indication that burnout is a process rather than a static phenomenon, that may be affected by individual, family or workplace changes that happen during the twelve months that follow (Cordes & Dougherty, 1993). Consequently, the turnover decision depends on the changes experienced by an employee during the twelve month period and how these changes affect the individual.

In a more recent study of Korean music therapists, Kim (2016: 21) found further support for the relationship between burnout and turnover intention in the human services professions. The researcher demonstrated that music therapists with higher job demands, lower social support or lower job autonomy experience higher burnout and ultimately increased likelihood of turnover intention. Furthermore, Elci *et al.* (2018: 57) found evidence that burnout is related to turnover intention in a sample of Turkish health employees. The researchers conceptualise burnout as a two-dimensional construct that comprises emotional exhaustion and depersonalisation. According to the results, supervisor support and subjective vitality are intervening variables that moderate the relationship between burnout and turnover intention. The results demonstrated that the association between burnout and turnover intention is stronger when the supervisor support and subjective vitality of the employees are higher. This unexpected finding may be as a result of paternalistic supervisors that use proactive approaches to deal with exhausted subordinates or the tendency of employees with high levels of subjective vitality to avoid undesired conditions.

2.10.2 Burnout and turnover intention in the education professions

The relationship between burnout and intention to leave or actual turnover in the education professions has been evaluated in many studies (e.g. Jackson *et al.*, 1986; Schwab *et al.*, 1986; Weisberg, 1994; Goddard & Goddard, 2006; Lee, 2017: 13). Maslach *et al.* (1996: 27-28) caution that teachers experience many challenges that may lead to serious negative consequences for the individual and other stakeholders. Society as well as management contribute to the high demands of teachers, but fail to supply the required human and financial resources to deal with these demands. Consequently, teachers may experience stress or burnout that may ultimately lead to leaving the profession. The current section will consider some of the literature on the relationship between burnout and turnover intention or actual turnover in the education professions across different settings and nationalities.

In a study of American teachers, Jackson *et al.* (1986: 637) found evidence that burnout, particularly emotional exhaustion, significantly predicts both thoughts about leaving the job and actual job turnover. On the contrary, the results showed that neither job search behaviour nor turnover intention is an outcome variable of burnout. The researchers propose that this unexpected finding may be related to methodological problems associated with range restriction. Schwab *et al.* (1986: 26) found evidence that turnover intention is a consequence of burnout in a sample of American teachers. The results, however, demonstrated that burnout explains only six percent of the variance in turnover intention of teachers. The authors argue that this finding is important, because even a modest reduction in turnover intention could lead to significant gains for the teaching profession.

In a study of Israeli female teachers, Weisberg (1994: 9, 12) found evidence that burnout and tenure are significantly associated with turnover intention. The study evaluates three measures of burnout in predicting intention to leave, namely overall burnout score, mean burnout score and three burnout factors: physical, mental and emotional exhaustion. The results demonstrated that intention to leave is significantly correlated with tenure, overall and mean burnout scores as well as physical and mental exhaustion components of burnout. In a study of South African school educators, Montgomery *et al.* (2005: 270) concluded that educators with inadequate resources to perform the high work demands in the field may experience burnout which in turn may contribute to impaired physical and psychological health amongst teachers. Furthermore, burnout may have production and financial implications for the organisation such as sick leave, health insurance and turnover. Goddard and

Goddard (2006: 69-73) found evidence that all three dimensions of burnout have meaningful and significant associations with serious early career turnover intentions in a sample of Australian teachers. A slight majority of teachers with serious turnover intentions opted to leave the profession rather than the job itself and reported higher levels of emotional exhaustion and depersonalisation as well as lower levels of personal accomplishment compared to respondents with no turnover intentions. The researchers propose that the findings of the study may provide an explanation for the high early career turnover rates reported for the teaching profession in many countries.

In a more recent study of physical education high school teachers, Lee (2017: 12-13, 18) found further support for the relationship between burnout and turnover intention in the education professions. The researcher demonstrated that teacher burnout is negatively associated with genuine expression, but positively associated with surface acting and turnover intention. According to the results, teachers that engage more in genuine expression experience lower levels of burnout and lower likelihood of turnover intention. Conversely, teachers that engage more in surface acting experience higher levels of burnout and higher likelihood of turnover intention. The report describes surface acting as teacher interaction with students based on acting, performing, pretending, masking and faking emotions. On the other hand, genuine expression is based on genuine, natural and spontaneous teacher interaction with students.

2.10.3 Burnout and turnover intention in other occupations

Many researchers have evaluated the relationship between burnout or its individual components and intention to leave or actual turnover in occupations other than human services and education (e.g. Moore, 2000; Rothmann & Joubert, 2007; Van Jaarsveld, Walker & Skarlicki, 2010; Han *et al.*, 2016; Lee & Eissenstat, 2018: 347; Kartono & Hilmiana, 2018: 119; Santoso *et al.*, 2018: 68). Maslach *et al.* (1996: 19-20) emphasize that interaction with people at work is central to this relationship in the human services and education professions, whereas in most other occupations the focus is primarily on the performance of work in general. The current section will discuss some of the literature on the relationship between burnout and turnover intention or actual turnover in occupations other than human services and education across different settings and nationalities.

In a study of city managers, Kaatz, French and Prentiss-Cooper (1999: 169-170) found evidence that respondents experiencing high levels of burnout are significantly

more likely to think about quitting compared to those experiencing low levels of burnout. The results demonstrated that almost half of the city managers that reported high levels of burnout were actively thinking of leaving the job, whereas only four percent of the city managers that reported low burnout actively considered quitting. Furthermore, none of the high burnout group and thirty five percent of the low burnout group reported never thinking of quitting. In a study of American information technology professionals, Moore (2000: 142, 158, 160) demonstrated that respondents experiencing higher levels of job burnout reported significantly higher levels of turnover intention compared to others. Furthermore, the results showed that perceived workload is the main predictor of job burnout. After a review of the literature, the author concluded that job burnout may be used interchangeably with the term work exhaustion. Job burnout is more narrowly defined as specifically dealing with the emotional dimension of exhaustion and is related to intense interaction with people. The author encourages research that deals with actual turnover as the outcome variable of burnout rather than turnover intention. Notwithstanding the importance of such research, turnover intention continues to be a salient variable that may signal the need to intervene and consequently reduce actual turnover.

Harris and Reynolds (2003: 154-155) caution that customer incivility can contribute to increased levels of employee workload and turnover with corresponding financial outcomes such as higher recruitment and retention costs. In a study of Canadian call centre employees, Van Jaarsveld *et al*. (2010: 12-13) refer to employee incivility as a reciprocal response to counter customer incivility that can erode the effectiveness of an organisation and increase customer turnover. Furthermore, job demands and emotional exhaustion were identified as intervening variables that sequentially mediated the relationship between customer incivility and employee incivility. Van Jaarsveld *et al*. (2010: 3) describe customer incivility as an employee perception that the customer is treating the employee in an uncivil, rude, insulting or disrespectful manner. On the other hand, employee incivility refers to a customer perception that the employee is treating the customer in an uncivil, rude, insulting or disrespectful manner. In a more recent study of frontline restaurant service employees, Han *et al*. (2016: 103-104) found evidence that customer incivility is positively related to burnout. The results demonstrated that organisational and supervisor support moderate the relationship between customer incivility and burnout. Furthermore, burnout was identified as an intervening variable that fully mediated the relationship between customer incivility and turnover intention.

In a study of insurance company employees, Schaufeli and Bakker (2004: 293, 307) found evidence that burnout and health problems of respondents are positively related to intention to leave the organisation. Burnout was identified as an intervening variable that mediates the relationship between job demands and health problems. Engagement, the positive antipode of burnout, was identified as an intervening variable that mediates the relationship between job resources and turnover intention. Maslach and Leiter (1997: 24) conceptualise energy, involvement and efficacy as the direct opposites of the three dimensions of burnout. Furthermore, the results showed that burnout and engagement have potentially different causes and consequences that must be considered when implementing intervention strategies. Engagement may be instrumental in improving retention of employees, however further discussion of the construct falls beyond the scope of this study and provide opportunities for future research.

Rothmann and Joubert (2007: 58) found evidence that the exhaustion and cynicism dimensions of burnout are negatively related to turnover intention in a sample of South African platinum mine workers. As noted before, this unexpected finding may be due to hardiness among the workers as a result of high levels of unemployment and poverty in South Africa that may encourage employees to develop coping mechanisms for burnout and to display satisfaction with working conditions. Furthermore, the results demonstrated that both burnout dimensions are positively related to physical as well as psychological ill health. Conversely, Lin *et al.* (2013: 462, 464) demonstrated that emotional exhaustion is positively associated with turnover intention in a sample of joint venture employees in China. Similarly, Chan *et al.* (2015: 360, 365) found evidence that the three components of burnout are significant predictors of turnover intention in a sample of Chinese casino employees. The results demonstrated that emotional exhaustion and depersonalisation are positively associated with turnover intention, whereas personal accomplishment is negatively associated with the outcome variable.

In a sample of South African call centre employees, Visser and Rothmann (2008: 84-85) found evidence that burnout is significantly related to turnover intention and accounts for forty one percent of the variance in the outcome variable. Furthermore, the results demonstrated that affective commitment partially acts as a mediating variable between burnout and turnover intention. DuPlooy and Roodt (2010: 11) found evidence that both work engagement and organisational citizenship behaviours are significantly negatively related to turnover intention in a sample of South African Information and Communication Technology (ICT) employees. Furthermore, the

results demonstrated that both burnout and work alienation are significantly positively related to turnover intention. Work alienation is described as emotional detachment from work due to a perception that the most important needs and expectations of an employee will not be realised (Kanungo, 1979: 131; Du Plooy & Roodt, 2010: 2).

In a more recent study of corporate technology employees, Lee and Eissenstat (2018: 347) found further support for the relationship between burnout and turnover intention in occupations other than human services and education. The researchers demonstrated that burnout is negatively associated with role clarity, but positively associated with work-to-family conflict, psychological job demands and turnover intention. According to the results, employees with higher levels of work-to-family conflict and psychological job demands or lower levels of role clarity experience higher burnout and likelihood of turnover intention. Conversely, employees with lower levels of work-to-family conflict and psychological job demands or higher levels of role clarity experience lower burnout and likelihood of turnover intention.

Furthermore, Kartono and Hilmiana (2018: 118-119) found evidence that burnout is related to turnover intention in a sample of banking employees. The researchers demonstrated that emotional intelligence is positively associated with burnout which in turn is positively associated with turnover intention. Emotional intelligence is conceptualised as a two-dimensional construct that comprises personal competence and social competence. According to the results, employees with high emotional intelligence experience high levels of burnout and are more likely to leave the organisation in the future. Similarly, Santoso *et al.* (2018: 68) found evidence that burnout is positively related to turnover intention in a sample of Indonesian auditors. According to the results, auditors that experience high levels of burnout report high likelihood of turnover intention.

2.10.4 Intervention strategies

Research on the relationship between burnout and turnover intention has been limited (e.g. Manlove & Guzell, 1997: 148), nevertheless some studies have proposed wellness programmes or interventions to mitigate the negative outcomes of the predictor variable. Blankertz and Robinson (1997: 528) proposed that burnout and its detrimental consequences could be reduced by training the more experienced workers as mentors for the younger employees and introducing teams that are supported by team leaders. Schaufeli and Bakker (2004: 293) caution that management must consider different interventions to reduce burnout or to enhance job engagement, because the constructs have potentially different determinants and

consequences. In an effort to improve production and reduce costs related to factors such as turnover, Montgomery *et al.* (2005: 270) encourage management to ensure educators have adequate resources to deal with increasing job demands and to introduce interventions that target the relationship between burnout and ill-health of employees.

Alarcon (2011: 557) suggests that management can reduce burnout and its negative outcomes such as intention to leave or turnover by clarifying work roles, reducing conflicting work demands and increasing work resources. The author cautions that the modern tendency of downsizing contributes to the challenge of reducing job demands and increasing job resources. In a study of joint venture employees, Lin *et al.* (2013: 465) suggest that burnout and turnover intention may be reduced by developing good human relationships with family, friends, co-workers and superiors. Maslach and Leiter (2016: 109) discuss a number of excellent intervention strategies to treat and prevent burnout experienced by employees. The authors, however, caution that it remains difficult to identify the best intervention strategies due to challenges relating to funding, designing, implementation and evaluation of the interventions. The selected company in the present study operates in similar environmental conditions and may benefit from these recommendations. It is in the interest of South African companies that future studies on burnout evaluate the feasibility of the recommended intervention strategies to mitigate the negative consequences of burnout.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The present study was conducted amongst employees at a selected electronics manufacturing company in South Africa in order to address the research questions outlined in chapter one. This chapter discusses the research design and methodology techniques that were used to ensure that data collection and analysis methods were suitable to test the hypothesis in the present study. The various elements of the research design and methodology will be explicated in the following sections in order to improve repeatability of the results and to facilitate formulation of valid conclusions. Firstly, the research design techniques that were used in the present study will be discussed as well as the justifications for choosing this approach. Next, the research methodology employed in the present study will be considered in terms of the research instruments, data collection methods and data analysis techniques. Finally, ethics requirements and procedures will be discussed in the concluding section of this chapter.

3.2 Research design

The present study adopted a cross-sectional quantitative research paradigm to evaluate the relationship between burnout and turnover intention in a selected electronics manufacturing company in South Africa. Some studies emphasise the importance of longitudinal research in identifying the relationships, antecedents and outcomes of burnout (e.g. Maslach *et al.*, 1996: 34-35). As noted before, funding, good relations with the organisation, willingness of the respondents to participate and reliable human resources records are important factors to ensure the success of longitudinal research. Furthermore, the selected company has a history of downsizing and layoffs that may increase the difficulty to access the same sample over multiple time periods. Due to the statistical and logistical challenges of longitudinal research (Maslach *et al.*, 1996: 34-35), the present study preferred a cross-sectional research design.

Some studies encourage research designs that are based on qualitative methods or mixed methodologies that integrate quantitative and qualitative approaches (e.g. Sutherland & Jordaan, 2004: 58; Visser & Rothmann, 2008: 83; Steckler, McLeroy, Goodman, Bird & McCormick, 1992: 2-3). Quantitative methods produce objective, factual and reliable data that are usually generalisable to larger populations, whereas qualitative methods produce subjective, detailed, rich and contextualised data that

keep the perspectives of the respondents intact (Steckler *et al.*, 1992: 2-3). Although qualitative approaches may be less costly initially, over the long term it may be time consuming, labour intensive and thus ultimately more costly compared to quantitative methods. On the other hand, quantitative approaches may be costly if reliable and valid research instruments do not exist and need to be developed in order to conduct the study. The present study preferred a quantitative methodology, because reliable and valid research instruments are available to measure the levels of burnout and turnover intention experienced by the respondents. Burnout levels of the participants were measured with the MBI-GS (Maslach *et al.*, 1996) while turnover intention levels were assessed with a modified version of the Brough and Frame survey (Brough & Frame, 2004).

The research instruments used in the present study consisted of self-administered questionnaires. Questionnaires are suitable for collection of vast amounts of data and have many advantages over other forms of data collection, for example little training required to develop, inexpensive to administer and quick to analyse (Wilkinson & Birmingham, 2003: 8). Self-administered questionnaires overcome the challenges related to sensitive information by allowing respondents to complete the survey in private. In an effort to overcome time pressures and technology constraints, the questionnaires were personally distributed in the form of paper copies and not via email or traditional mail. Research designs of a qualitative or longitudinal nature are not feasible in the present study, due to the financial and time constraints of completing a Masters' dissertation as a part-time student. The research design employed in the present study is the best approach under the current conditions, because it minimises production interruptions and the need for financial resources.

3.3   Quantitative methodology

The research design discussed above was implemented in the present study by means of a quantitative methodology. Appropriate methods of data collection and analysis were selected to answer the following research questions:

- What is the level of burnout amongst employees at the selected company?
- What is the level of turnover intention amongst employees at the selected company?
- Is there a difference in the turnover intention of employees with high burnout as opposed to those with low burnout?
- If there is a difference in the turnover intention of employees with high burnout as opposed to those with low burnout, what is the nature of this difference?
- Is there a relationship between burnout and turnover intention at the selected company?

In order to facilitate the logical structure of the discussion, this section was sub divided into five subsections that will be considered below, namely research instruments, description of the sample, description of the data, data analysis and factor structure of the MBI-GS.

3.3.1 Research Instruments

The main goal of the quantitative methodology was to assess the levels of burnout and turnover intention amongst electronics manufacturing employees and to compare these variables in terms of high and low burnout groups. In order to accomplish this objective, the study used a self-administered questionnaire to collect the research data.

Burnout levels experienced by respondents were measured using the MBI-GS instrument (Maslach *et al.*, 1996). The MBI-GS was developed for occupations other than the helping services professions and assesses the three components of burnout, namely exhaustion, cynicism and professional efficacy.

Turnover intentions of employees were measured using a modified version of the Brough and Frame Turnover Intention survey (Brough & Frame, 2004). Chapter two of this document provides a detailed overview of the history and development of these research instruments, however for the sake of completeness, a brief discussion is included below.

3.3.1.1 Maslach Burnout Inventory – General Survey (MBI-GS)

According to Maslach *et al.* (1996: 1-2), the MBI has become the most popular instrument to measure the levels of burnout experienced by employees in an organisation. As noted before, the original MBI was designed for the human services occupations where employees experience intense interaction with other people (Maslach & Jackson, 1981: 99-100, Maslach *et al.*, 1996: 3-4). The MBI-GS is a derivative of the original MBI and is intended for use with other occupational groups where employees experience no direct contact or only casual contact with people (Maslach *et al.*, 1996: 20-21). Unlike the original MBI that accentuates emotions and service recipients, the MBI-GS focuses on performance of work. The present study used the MBI-GS to assess the burnout levels of the respondents, because the research sample is comprised of occupations other than human services and education such as managers, clerical workers, office workers, production workers, maintenance workers, technicians and engineers.

As mentioned before, the MBI-GS has three subscales that measure the independent variable on a continuum from work engagement to burnout, namely exhaustion, cynicism and professional efficacy. Burnout is viewed as a continuous variable that ranges from low to moderate to high rather than a dichotomous variable that is either present or absent (Maslach *et al.*, 1996: 5). High scores of exhaustion and cynicism combined with low scores of professional efficacy reflect high levels of burnout. Low scores of exhaustion and cynicism combined with high scores of professional efficacy reflect low levels of burnout. In an effort to avoid duplication, this section will only briefly discuss the MBI-GS. The literature review chapter includes a more detailed discussion of the MBI-GS in terms of its design, historical development, reliability and validity. The MBI-GS burnout instrument is included in the second section of the self-administered questionnaire in Appendix C of this document.

The three-dimensional nature of the MBI makes sense from a research perspective, but creates statistical challenges for practitioners and the general public who prefer to assess burnout as a one-dimensional construct with a single score (Maslach, Leiter & Schaufeli, 2008: 97-98). In an effort to avoid oversimplification of the construct and to examine the interrelationships between the three dimensions of burnout, subscale scores are considered separately and not combined into a single score (Maslach *et al.*, 1996: 5). The analysis of burnout in the present study was based on a multi-dimensional approach rather than a single score. Although the MBI-GS has been used predominantly in other countries (e.g. Leiter & Schaufeli, 1996; Richardsen & Martinussen, 2005), some studies used the research instrument to analyse burnout in the South African context (e.g. Montgomery *et al.*, 2005; Rothmann & Essenko, 2007; Rothmann & Joubert, 2007).

Several studies focussed on the stability of the MBI-GS subscales across different settings, occupations and countries (e.g. Schaufeli, Leiter & Kalimo, 1995; Maslach *et al.*, 1996: 22-23; Leiter & Schaufeli, 1996; Richardsen & Martinussen, 2005). Schaufeli *et al.* (1995) report that a confirmatory factor analysis was conducted with some of the samples mentioned above to test a 28-item MBI-GS scale (in Maslach *et al.*, 1996: 22-23). Selection criteria regarding skew, kurtosis and frequency of missing responses were used to reduce the MBI-GS from 28 to 24 items. The MBI-GS was further reduced to 16 items through regression and factor analyses. Schaufeli *et al.* (1995) found that the factor structure of the MBI-GS is stable across nations, namely Finland, Holland and Canada. The same factor structure was confirmed across settings for Canadian employees of a tertiary care hospital and a mental health facility (Leiter & Schaufeli, 1996). Further confirmatory factor analyses conducted on the

tertiary care hospital sample confirmed the three factor structure of the MBI-GS across a variety of occupations; including managers, clerical workers, maintenance workers, technologists, therapists and nurses. The three factor structure of the MBI-GS was also validated by other researchers (e.g. Taris, Schreurs & Schaufeli, 1999; Schutte, Toppinen, Kalimo & Schaufeli, 2000: 63; Richardsen & Martinussen, 2005: 289).

Occasionally, studies produce different results, for example Salanova and Schaufeli (2000: 389-390) tested the factorial validity of the Spanish version of the MBI-GS for a sample of technology workers and found a four factor structure. The results demonstrated that the professional efficacy subscale splits into two unrelated dimensions; namely attainment of goals and level of self-confidence. The researchers speculated that the unexpected findings may be unique to technology workers or due to issues related to the translation of the questionnaire. Schutte *et al.* (2000: 55, 63) tested the factorial validity of the MBI-GS by contrasting its one, two and three factor structure models. In the one factor model it is assumed that all MBI items load on a single factor. The two factor model is based on the assumption that the exhaustion and cynicism subscale items collapse into one factor and professional efficacy items form a separate factor. Confirmatory factor analyses conducted with five occupational groups namely managers, clerks, foremen, technical professionals and blue-collar workers found that the three factor structure fitted the data better than the one and two factor models.

Although many studies found evidence that a three factor structure is the best model for the MBI-GS (e.g. Taris *et al.*, 1999: 233; Schutte *et al.*, 2000: 63; Richardsen & Martinussen, 2005: 296), some researchers found support for a two factor structure (e.g. Brookings *et al.*, 1985: 149; Dignam, Barrera & West, 1986: 183). Furthermore, some studies do not consider professional efficacy a component of burnout and therefore support a unique two factor structure that includes exhaustion and cynicism (e.g. Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2001: 84; Qiao & Schaufeli, 2011: 89-90, 103). According to the results in section 3.3.5, the factor analysis produced a two factor solution for the MBI-GS where exhaustion and cynicism formed one factor and the second factor comprised professional efficacy. All sixteen items of the construct were represented in the two factors of the MBI-GS and the internal consistency of the instrument was sufficient. As a result, the two factor MBI-GS was accepted as a valid burnout measure in the present study.

Schaufeli *et al.* (1995) analysed the subscales of the MBI-GS and found correlations between the three components of burnout and other constructs; including mental strain, physical strain, work overload, role conflict, satisfaction, organisational commitment, job involvement and resource availability (in Maslach *et al.*, 1996: 25). Correlations were also confirmed between the individual MBI-GS scores and written responses from participants (Leiter & Schaufeli, 1996: 241). These correlations provide evidence to support the validity of the MBI-GS and its consistency with the original MBI. Schutte *et al.* (2000: 57) found that the internal consistency is sufficient for the exhaustion and professional efficacy subscales, but that item 13 ("I just want to do my job and not be bothered") should be removed to improve the internal consistency of the cynicism subscale beyond 0.70. The low factor loading of cynicism item 13 may be contributed to uncertainty about the meaning of the item, for example, high item scores may be associated with the desire for social isolation or motivation to perform the work without interruption (Salanova & Schaufeli, 2000: 390). Previous studies that used the MBI-GS with South African samples reported mixed results when cynicism item 13 is omitted from the survey (in Rothmann, 2003: 19). Removing item 13 improves the internal consistency in some cases, but in others result in lower alpha coefficients for the cynicism subscale. The present study demonstrated that all sixteen items were represented in the two factors of the MBI-GS and the internal consistency of the instrument was sufficient. As a result, cynicism item 13 was included in the present study.

In an effort to differentiate between burnout levels, Maslach *et al.* (1996: 5-9) propose numerical cut-off points that are arbitrarily derived by dividing the ordered normative distribution into three equal groups. Subscale scores are considered high if in the upper third of the distribution, average if in the middle third and low if in the lower third. This classification of burnout ensures that each of the burnout tertiles represents 33 percent of the population. The MBI provides numerical cut-off points that are based on a North American sample and that may be used for comparisons of individual or group means. The authors, however, caution that neither the coding nor the original numerical scores should be used for diagnostic purposes, because the research is insufficient to determine the thresholds for dysfunction or intervention. Additionally, Schaufeli and Van Dierendonck (1995: 1084) caution that cut-off points for North America are not clinically validated and are invalid for populations in other countries. As an exception, Schaufeli *et al.* (2001: 579) clinically validated cut-off points for the Dutch version of the MBI in a sample of psychotherapeutic outpatients in the Netherlands. Clinically validated cut-off points for burnout do not exist for South Africa and provides opportunities for future research. The present study determined

cut-off points for the sample by dividing the scores on the different subscales into tertiles as recommended by Maslach *et al.* (1996: 5).

Previous studies have highlighted the following limitations that are inherent to burnout instruments such as the MBI-GS. Schaufeli, Enzmann and Girault (1993: 211-212) conclude that most burnout instruments are self-report metrics that primarily assess the construct on an individual level which may contribute to methodological and measurement variances. Schaufeli *et al.* (2001: 568) caution that the lack of clinically validated cut-off points is a major shortcoming of the MBI as an assessment tool. Schaufeli (2003: 4) agrees that the MBI is a good instrument to measure burnout, but argues that the metric must be expanded to include a cognitive weariness scale to remedy its limited scope from a clinical perspective. Demerouti, Bakker, Nachreiner and Schaufeli (2001: 500) caution that the items in each MBI subscale are phrased in the same direction and may ultimately lead to false factor loadings. While exhaustion and cynicism items are phrased negatively, professional efficacy items are phrased positively. The limitations of the present study are discussed in detail in chapter 5 of this document.

3.3.1.2 Turnover intention survey

Turnover metrics that are based solely on turnover frequency ignore the performance levels of employees and may have negative outcomes for the organisation (Johnston & Futrell, 1989: 150-152). Some studies overcome this shortcoming by considering the turnover functionality of stayers and leavers when measuring the outcome variable (Johnson *et al.*, 2000: 401-402). This metric is an improvement over approaches that use the Hollenbeck and Williams (1986) method of operationalisation, because it is able to fully differentiate between the different performance groups. The Hollenbeck and Williams (1986) method cannot adequately discriminate between the different criterion groups, because some groups may have identical scores. Mitchell *et al.* (2000: 340), however, argue that turnover intention is a more practical measure than actual turnover that is based on potentially inaccurate records. Turnover intention can be evaluated with a cross sectional methodology and thereby avoid the logistical shortcomings of longitudinal studies that are required in the case of actual turnover (Mor Barak *et al.*, 2001: 630; Maslach *et al.*, 1996: 34). The researchers caution that funding, organisational relations and willingness to participate may have detrimental consequences for longitudinal research. Mergers and downsizings at the selected company may therefore create challenges for the logistical demands of longitudinal studies.

As mentioned before, turnover intention is a suitable substitute for actual turnover, because findings from previous studies confirmed the significant relationship between these variables (e.g. Lee & Mowday, 1987: 737; Tekleab *et al.*, 2005: 153). The strength of the relationship, however, is influenced by the specificity of the intention statement and the time interval between measures (Mobley, Griffeth, Hand & Meglino, 1979: 517; Hom, Katerberg & Hulin, 1979: 288; Waters & Roach, 1979: 395). The relationship is stronger when the intention statement is more specific and the measurement of the variables is closer in time. Mobley *et al.* (1979: 517) conclude that impulsive behaviour weakens the relationship between turnover intention and turnover behaviour. Hom *et al.* (1979: 288) caution that the accuracy of predicting turnover will be poor if the event is too distant in time from the assessment of the intention to leave. Turnover intention was selected as the dependent variable in the present study to overcome some of the above-mentioned challenges related to the measurement of actual turnover.

Brough and Frame (2004: 10-11) analysed turnover intention of New Zealand police officers by means of three questions that were answered on a five-point Likert response scale. Other researchers have also evaluated turnover intention with the use of a three-item instrument (e.g. Weisberg, 1994: 6; Lum *et al.*, 1998: 312; Chiu & Francesco, 2003: 289). Furthermore, Brough and Frame (2004: 11) found acceptable inter-item correlations and internal consistency for the three-item turnover intention metric. Despite these findings, some researchers continued to use single item metrics to measure intention to leave (e.g. Kraut, 1975: 237; Udo *et al.*, 1997: 920; Janssen *et al.*, 1999: 1364; Johnson *et al.*, 2000: 405). Previous studies have analysed turnover intention in similar ways, but with minor differences in the number of items, nature of the questions and response scales, for example two item metric (Martin, 1979: 318), four item metric (Moore, 2000: 147), six item metric (Wegge, van Dick, Fisher, Wecking & Moltzen, 2006: 72), five point response scale (Udo *et al.*, 1997: 920), six point response scale (Janssen *et al.*, 1999: 1364). The present study used a modified version of the three item instrument that was used by Brough and Frame (2004: 10-11) to evaluate turnover intention at the selected company.

As is the case for burnout, validated cut-off points for turnover intention do not exist in the South African context and therefore provide opportunities for future research. The present study determined numerical cut-off points for turnover intention by arbitrarily dividing the ordered normative distribution into three equal groups. Subscale scores are considered high if in the upper third of the distribution, average if in the middle third and low if in the lower third. This classification is similar to the burnout approach

and ensures that each of the turnover intention tertiles represents 33 percent of the population. The modified turnover intention instrument is included in the second section of the self-administered questionnaire in Appendix C of this document.

3.3.1.3 Questionnaire pilot study

Van Teijlingen and Hundley (2001: 1, 4) highlight the importance of pilot studies and encourage researchers to discuss the particulars of improvements to the research design in more detail. Pilot studies may increase the likelihood of success in research projects by identifying and mitigating practical problems and constraints. The questionnaire used in the present study was subjected to a pilot study by administering the instrument to a convenience sample of four participants. Respondents who participated in the pilot study included one English-speaking female statistician, one English-speaking female Human Resources manager and two Afrikaans-speaking male worker union representatives. Van Teijlingen and Hundley (2001: 2) caution that research results may be contaminated if pilot study participants are allowed to participate in the main study. The authors speculate that pilot study participants have experience of the intervention and may therefore respond differently compared to first-time participants. In an effort to avoid contamination of findings, all the individuals who participated in the pilot study were excluded from the main study.

An attempt was made to ensure that the pilot study was conducted under the same environmental conditions as the main study. The questionnaire was presented to a registered statistician for review to determine if the instrument is adequate from a statistical analysis perspective. After completion of the pilot study, the respondent was asked to provide feedback and to identify difficult questions or ambiguities. The statistician was generally satisfied with the questionnaire, but proposed three minor recommendations to improve the accuracy of the instrument. Firstly, item V4 was changed from a question that required a coded response to one that allowed respondents to enter the number of children. Secondly, item V6 "How would you describe your current economic status?" was removed from the questionnaire because responses to this question would be based on the perception of individuals and results would not be comparable. Thirdly, the scales of items V13, V14 and V15 were changed to "Very unsatisfied", "Unsatisfied", "Neutral", "Satisfied" and "Very satisfied" in order to improve the accuracy of the responses. The original response scales for these items were "Not satisfied at all", "Not satisfied", "Somewhat satisfied", "Very satisfied", "Extremely satisfied" and "Not applicable".

In order to ensure face validity, the questionnaire was submitted to the Human Resources manager from the selected company for review. The manager satisfactorily examined the questionnaire for face validity and agreed that the items were appropriate in terms of the nature and wording of the questions as well as the research topic. Furthermore, the manager was in full support of the questionnaire distribution and collection procedure that was proposed for the main study.

In order to conduct a pilot study of the final questionnaire, the survey was administered to two representatives of the workers union at the selected company. Union representatives have close relationships with the majority of employees in the selected company and are therefore valuable in identifying potential challenges that respondents may experience when completing the survey. The time that respondents required to complete the questionnaire was observed and after completion of the survey, respondents were engaged regarding language, ambiguities and difficult questions. Only one concern was raised by the union representatives regarding interpretation of questions by non-English speaking candidates. In an effort to overcome this challenge, the researcher made sure that suitable translators were available to assist respondents during the main study. The survey was completed by the workers union representatives well within the allocated time frame as agreed with the selected company.

3.3.1.4 Questionnaire Structure

The self-administered questionnaire was accompanied by a letter (See Appendix B) that provided a brief overview of the purpose, reason and duration of the study. Respondents were informed that participation would be voluntary and that the data collected would be used strictly for research purposes. The letter provided a guarantee to respondents that participation would be anonymous and confidential because names of participants were not to be recorded. Furthermore, the letter provided the contact details of the researcher in order to allow respondents to directly raise queries or concerns related to the study. In an effort to ensure that only the target sample participated, the questionnaire advised that employees in the process of retrenchment or relocation were not required to complete the survey. Schaufeli (2003: 5) cautions that ignoring employees that suffer from extreme burnout or turnover may contribute to the "healthy worker effect" and potentially inflate the results. Nonetheless, these individuals were excluded from the survey, because the affected employee group falls beyond the scope and feasibility of the present study. The questionnaire provided an example question and answer to improve uniformity in the way respondents record answers to questions.

All the recommendations from the pilot study were implemented in the final version of the questionnaire. Research data was collected with a self-administered structured questionnaire that was subdivided into two sections. The first section of the questionnaire collected selective biographical and work related information of the respondents. This section comprised fifteen questions (V1-V15) related to demographic variables and work related information. Questions included in this section related to a range of variables including age, gender, marital status, number of children, highest education, tenure, employment type and department. Additionally, the questionnaire measured the importance of family, friends, religion and work as well as relationships with co-workers, supervisors and subordinates. As mentioned in the literature review, ethnicity as a demographic variable of burnout was excluded from the present study due to concerns that ethnic classifications may offend participants and ultimately lead to fewer responses.

The second section of the questionnaire included two existing instruments that measured employee perception and reaction to work, namely the MBI-GS burnout metric and the modified Brough and Frame (2004) turnover intention survey. These instruments were included in the second section of the questionnaire to shift focus away from the main variables and to avoid over inflation of burnout or turnover intention scores. In order to avoid sensitisation to burnout, the respondents had to be unaware that the MBI-GS is a burnout measurement (Maslach *et al.*, 1996: 5-7, 22). For this reason, the scales of the instrument were presented as a metric that evaluates the attitudes of employees toward work duties and were not linked to burnout in any way. The respondents, however, were informed of the true nature of the study after the completion of the survey. As mentioned above, the requirements for participant privacy and confidentiality were satisfied, because names of respondents were not recorded during the survey. The MBI-GS has a unique measuring scale for each of the burnout components and provides independent scores for each (Maslach *et al.*, 1996). The individual as well as the combined sub-scale scores provide useful measures to understand and interpret burnout. The MBI-GS measures burnout using sixteen items (V16-V31) on a seven-point scale ranging from "never" to "daily" (e.g. Wiese, Rothmann & Storm, 2003: 74). Exhaustion and cynicism have five items each and professional efficacy has six items. The MBI-GS is the preferred metric to assess burnout in occupations other than human services and education such as those present in the selected company, for example managers, production workers and engineers.

Turnover intention was measured by means of a modified version of the three item instrument that was used by Brough and Frame (2004: 10-11) to evaluate turnover intention of New Zealand police officers. As speculated by Weisberg (1994: 13), this multi-item instrument is preferred over a single item metric for turnover intention. According to the author, unfavourable or unpleasant situations evaluated as a single global item is likely to be assessed with more severity than phenomena evaluated item by item. The three item turnover intention instrument overcomes the shortcoming of the single item instrument that may lead to distorted results. Business functions at the selected company are performed by various occupations; including managers, office workers, production workers, maintenance workers, technicians and engineers. As a result, the wording of the questions in the original instrument was changed slightly to make it more appropriate for the targeted population. All references to the New Zealand police service were removed from the questions and the evaluation period was increased from six months to twelve months on the new questionnaire. The modified instrument measures turnover intention using three items (V32-V34) on a five-point response scale. Response scales for the first two questions range from "not at all" to "a great deal", whereas the remaining question has a response scale ranging from "very unlikely" to "very likely".

3.3.1.5 Questionnaire Administration

Only some of the employees at the selected company had access to internet or email and in an effort to ensure consistency, questionnaires were distributed in the form of pen-and-paper copies. Previous studies that compared pen-and-paper questionnaires and electronic surveys sent via the internet or email reported inconsistent findings. Boyer, Olson, Calantone and Jackson (2002: 370-371) found evidence that electronic surveys are generally similar to pen-and-paper questionnaires with only a few differences between the methods, for example electronic surveys have fewer missing responses compared to traditional questionnaires and are more flexible in terms of presentation. On the other hand, traditional questionnaires are easier to understand and require less training investment than electronic surveys. In a more recent study, Rolfson, Salomonsson, Dahlberg and Garellick (2011: 320) demonstrated that electronic surveys are not sufficient to replace pen-and-paper questionnaires. The authors propose that the significantly lower response rates from internet surveys may be due to over-complicated electronic access procedures and sensitivities of participants to answer questions via the internet.

In order to minimise response bias, the MBI burnout instrument must be administered in an environment that ensures respondent privacy, confidentiality and avoidance of

sensitisation to burnout (Maslach *et al.*, 1996: 5-7, 22). As mentioned before, the questionnaire in the present study satisfied all these requirements. Furthermore, the researchers suggest that the instrument should be administered by an examiner to minimise response bias and improve response completion. Training of special examiners, however, was not possible due to production demands at the selected company and the instrument was therefore administered as a self-administered questionnaire. The researchers have advised that respondents require between five and ten minutes to complete the MBI-GS burnout instrument. Respondents in the present study had twenty minutes to complete the entire survey including the biographical, burnout and turnover intention questionnaires.

The questionnaire administration process in the present study was characterised by a number of interventions designed to improve the response rates of the participants. In an effort to provide information regarding the study, the researcher had meetings with all the relevant stakeholders in the selected company. After receiving written management approval to conduct the study, the researcher had a further meeting with the Human Resources manager to discuss issues relating to the administration of the questionnaires including the distribution and collection procedures. The manager highlighted the agreed conditions of the selected company, including minimum work disruption, non-disclosure of company name and confidentiality of company documents. In an effort to minimise work disruption, it was agreed that the survey would be distributed and collected within one week. The questionnaire was designed to be as short as possible in order to make it suitable for completion during off-peak production intervals and consequently to minimise work disruption. In line with company policies, the manager agreed to send three emails to all employees in the selected company to encourage potential respondents to participate in the study.

Further meetings were conducted with the production supervisors and workers union representatives of the selected company. The researcher informed the attendees of the research objectives and assured them that the study was initiated by the researcher and not by the selected company. Furthermore, sensitive questions in the survey were highlighted and assurances were provided regarding anonymity and confidentiality. All other relevant issues were discussed including duration of survey, distribution and return of the questionnaires. Supervisors and union representatives were asked to encourage employees to participate and to provide assurances to alleviate suspicion regarding the study. These meetings were concluded with agreement and support for the study from both supervisors and union representatives. Agreement and support from management, production supervisors

and workers union representatives may contribute to increased response rates in the present study.

As mentioned in the previous section, the self-administered questionnaire was accompanied by a cover letter that communicated the purpose, importance, time requirements and completion date for the survey. Furthermore, the letter informed potential respondents that participation would be voluntary, anonymous and confidential. In order to respond to concerns from participants, the letter provided the contact details of the researcher. The survey provided all the required information to potential respondents regarding employees excluded from the study, survey completion instructions and return procedure for completed questionnaires.

The procedure to distribute the questionnaires was initiated by an email from the Human Resources manager informing all employees in the selected company of the study. As requested by the researcher, the manager encouraged potential respondents to participate in the survey. The email highlighted that it would take no more than twenty minutes to complete the questionnaire and that participation would be voluntary, anonymous and confidential. Furthermore, the email emphasised that participants should answer all questions in order to ensure that the data is sufficient for research purposes. The email cautioned that employees in the process of retrenchment or relocation would be excluded from the study and should not complete the questionnaire. Furthermore, the email described the return procedure for completed questionnaires and provided the contact details of the researcher in order to directly accommodate queries from participants. Employees without email access were informed of the study by team leaders, supervisors and managers. The researcher distributed paper copies of the questionnaire and return envelopes to all production supervisors who, in turn, handed copies to their teams. Employees in departments that were not part of production received copies of the questionnaire and return envelopes directly from the researcher.

Two days later, and in agreement with the researcher, the Human Resources manager of the selected company sent out a second email to remind potential respondents of the importance of participating and the approaching completion date for the survey. All the important information included in the first email was repeated in the second email. Three days later and in agreement with the researcher, the Human Resources manager of the selected company sent out a final email reminder to potential respondents to inform them that it was the last day for the survey. All the important information included in the first two emails was repeated in the third email.

The importance of participation and completion of the survey was again emphasised and all respondents were informed that the researcher would collect completed questionnaires at the end of business day. As described in the questionnaire, production workers could either return completed questionnaires via supervisors or through the collection box in the canteen. Employees may have been concerned that their right to anonymity and confidentiality would be violated if completed questionnaires were to be returned via their supervisor. In order to overcome this challenge, the researcher requested participants to return completed questionnaires inside the sealed envelopes that were distributed at the start of the survey.

Once the completion date of the survey was reached, the researcher collected all the completed questionnaires from the production supervisors, non-production employees and collection box in the canteen of the selected company. Fifty nine percent of the completed questionnaires were returned via the collection box in the canteen and the rest were collected directly from employees or supervisors. All completed questionnaires were returned in the sealed envelopes that were provided with the survey. This provided further confirmation of anonymity and confidentiality of responses, because it ensured that the questionnaires of participants could not be viewed by their supervisors or managers. In order to prepare for data analysis, the researcher captured the responses from the survey in a SPSS data file. Data collected in the present study was only used for research purposes and is stored by the researcher in Cape Town, South Africa.

3.3.2 Description of the Sample

The present study used a non-probability methodology to evaluate the relationship between burnout and turnover intention amongst employees at a selected electronics manufacturing company in Cape Town, South Africa. Seeletse (2001: 505) cautions that non-probability sampling cannot produce justifiable generalisations unless additional research is conducted. The researcher is not concerned about this shortcoming, because the main objective of the present study is to evaluate the relationship between the variables at the selected company. Generalising the findings from the present study to other populations provide opportunities for future research. The national population for the electronics manufacturing industry in South Africa is much bigger than the total number of employees at the selected company. Nonetheless, for the purpose of the present study, the register of current employees at the selected company was used as the sampling frame for the study.

Although the selected company is part of an international business, the present study focussed only on its activities in Cape Town, South Africa. At the time of the study, the selected company employed a total of 283 employees in various departments and positions. Fifty three of these employees were excluded from the study for various reasons. Three employees were permanently located off-site at another company and therefore excluded from the study. Five employees from partner companies had permanent offices at the selected company and were also excluded from the study. Twenty two employees were directly affected by retrenchments or relocations and were therefore not included in the study. At the time of the study, all employees in the engineering department were either in the process of retrenchment or relocation to the parent company. Twenty employees were from companies providing outsourced services to the selected company and were therefore excluded from the study. Three employees that participated in pilot studies were not included in the main study. Temporary employees were also included in the study, because many of them have been with the company for years on short-term contracts. Supervisors, union representatives and managers were asked to make sure that the employees excluded from the study do not get questionnaires.

A total of 230 employees were included in the sample population and invited to complete the questionnaire. The potential respondents that were selected for the survey were employed across different departments and occupied various roles including production workers, human resources employees, supervisors, managers, technicians and engineers. Once the completion date for the survey was reached, a total of 133 completed questionnaires were returned, resulting in a response rate of fifty eight percent. The response rate in the present study was significantly higher than the average rate of fifty percent that is recommended by Baruch and Holtom (2008: 1155) for data collected on an individual basis. The researcher proposes that the increased response rate is due to support for the study from both management and union representatives at the selected company.

3.3.3 Description of the data

This section describes fifteen demographic and work related variables that correspond to the questions in section one of the questionnaire including age, gender, marital status, number of children, highest education, tenure, employment type and department. Additionally, variables related to the importance of family, friends, religion and work as well as relationships with co-workers, supervisors and subordinates are discussed. The age of respondents is presented in Tables 3.1 and 3.2 with respect to the distribution, mean and standard deviation of the variable.

Table 3.1: Age of respondents (N = 119)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
21	4	3.0	3.4	3.4
23	3	2.3	2.5	5.9
24	2	1.5	1.7	7.6
25	4	3.0	3.4	10.9
26	4	3.0	3.4	14.3
27	5	3.8	4.2	18.5
28	1	.8	.8	19.3
29	2	1.5	1.7	21.0
30	3	2.3	2.5	23.5
31	6	4.5	5.0	28.6
32	4	3.0	3.4	31.9
33	5	3.8	4.2	36.1
34	2	1.5	1.7	37.8
35	7	5.3	5.9	43.7
36	3	2.3	2.5	46.2
37	8	6.0	6.7	52.9
38	1	.8	.8	53.8
39	4	3.0	3.4	57.1
40	7	5.3	5.9	63.0
41	5	3.8	4.2	67.2
42	8	6.0	6.7	73.9
43	4	3.0	3.4	77.3
44	3	2.3	2.5	79.8
45	1	.8	.8	80.7
46	4	3.0	3.4	84.0
47	3	2.3	2.5	86.6
48	3	2.3	2.5	89.1
49	2	1.5	1.7	90.8
51	4	3.0	3.4	94.1
52	1	.8	.8	95.0
53	1	.8	.8	95.8
54	3	2.3	2.5	98.3
55	1	.8	.8	99.2
60	1	.8	.8	100.0
Total	119	89.5	100.0	
Missing	14	10.5		
Total	133	100.0		

Table 3.2: Age of respondents (mean and standard deviation)

Valid Responses (N = 119)	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Std. Error	Statistic
Age of Respondents	21	60	37.22	.813	8.868

The youngest respondent that participated in the present study was 21-years-old and the oldest was 60-years-old. Mean age of the respondents was 37.22 years with a standard deviation (SD) of 8.87 years. Sixty three percent of the respondents were aged between 21-years-old and 40-years-old. This suggests that the respondents are relatively young with the majority of the participants aged 40-years-old or younger. The second largest group of respondents was aged between 40-years-old and 51-years-old and represented around 31 percent of the sample. Respondents between 51-years-old and 60-years-old made up the last cohort that represented around 6 percent of the sample.
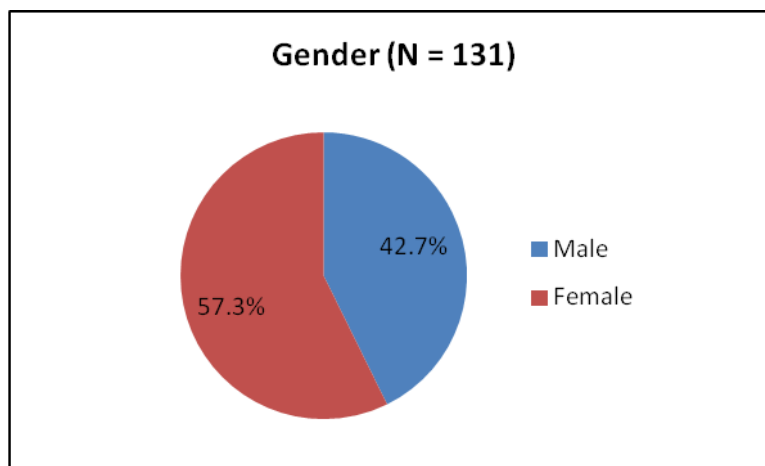
Figure 3.1: Gender distribution of respondents

The gender distribution of the respondents was made up of fifty six males and seventy five females representing around 43 percent and 57 percent of the sample respectively. As illustrated in Figure 3.1, the respondents represented in the gender groupings were predominantly female.
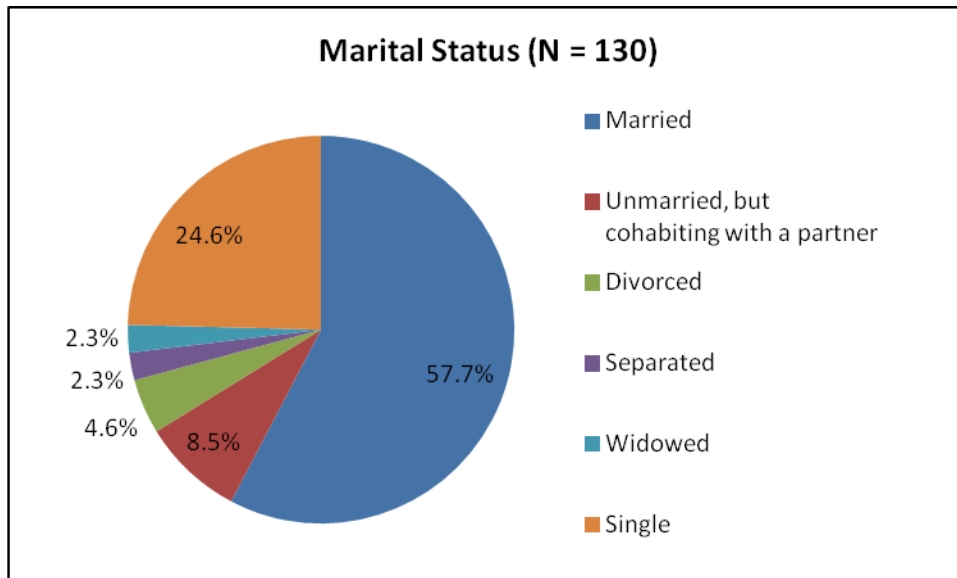
Figure 3.2: Marital status of respondents

As shown in Figure 3.2, more than half of the respondents in the study were married, while a further 8.5 percent were unmarried, but cohabiting with a partner. Almost a quarter of the participants in the study were identified as single. The last cohort represented 9.2 percent of the sample and was made up of respondents that were divorced, separated or widowed.
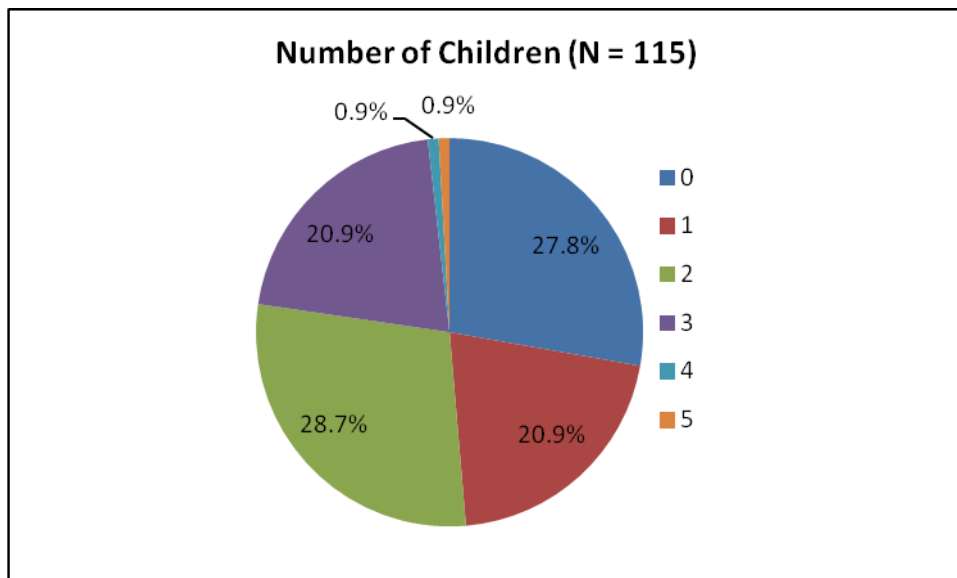
Figure 3.3: Number of children of respondents

The minimum number of children reported by the respondents was zero and the maximum was five. As shown in Figure 3.3, just over a quarter of the respondents in the study had no children, while those with one to three children accounted for 70.5 percent of the sample. Respondents that had between four and five children only accounted for two responses which represented 1.8 percent of the sample.
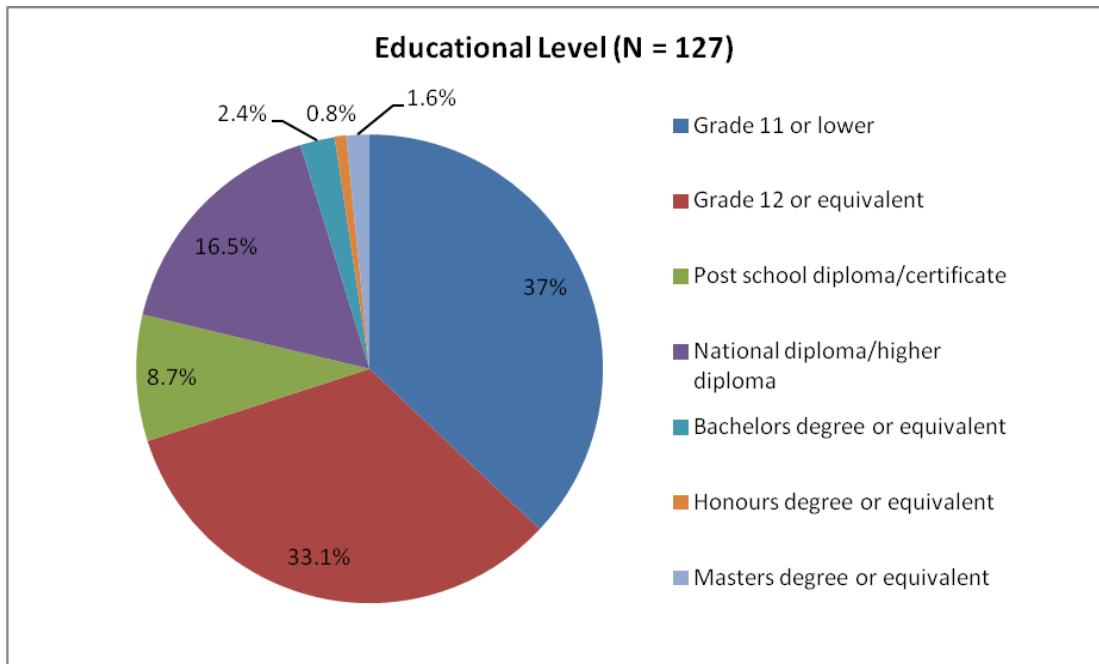
Figure 3.4: Educational level of respondents

As illustrated in Figure 3.4, around 70 percent of the respondents reported that the highest educational qualification was at school level. Thirty seven percent of the respondents had qualifications up to grade 11 and a further 33.1 percent had grade 12 or equivalent. Just over a quarter of the respondents reported post school certificates and diplomas as the highest educational qualification. The last cohort accounted for 4.8 percent of the sample and represented 2.4 percent of respondents with bachelor's degrees, 0.8 percent with honours degrees and 1.6 percent with master's degrees.

Table 3.3: Job tenure of respondents (N = 124)

Job Tenure	Frequency	Percent	Valid Percent	Cumulative Percent
.17	1	.8	.8	.8
.25	1	.8	.8	1.6
.50	2	1.5	1.6	3.2
.92	1	.8	.8	4.0
1.00	1	.8	.8	4.8
1.08	1	.8	.8	5.6
1.25	1	.8	.8	6.5
1.42	1	.8	.8	7.3
1.50	9	6.8	7.3	14.5
1.58	2	1.5	1.6	16.1

Job Tenure	Frequency	Percent	Valid Percent	Cumulative Percent
1.67	1	.8	.8	16.9
2.00	1	.8	.8	17.7
2.08	1	.8	.8	18.5
2.17	1	.8	.8	19.4
2.42	1	.8	.8	20.2
2.83	1	.8	.8	21.0
3.00	3	2.3	2.4	23.4
3.25	1	.8	.8	24.2
3.42	1	.8	.8	25.0
4.67	2	1.5	1.6	26.6
5.00	1	.8	.8	27.4
5.08	1	.8	.8	28.2
5.17	1	.8	.8	29.0
5.42	2	1.5	1.6	30.6
5.50	1	.8	.8	31.5
5.58	1	.8	.8	32.3
6.00	2	1.5	1.6	33.9
6.42	1	.8	.8	34.7
6.58	1	.8	.8	35.5
6.67	1	.8	.8	36.3
6.83	1	.8	.8	37.1
7.17	1	.8	.8	37.9
7.33	1	.8	.8	38.7
7.50	1	.8	.8	39.5
7.75	1	.8	.8	40.3
8.00	4	3.0	3.2	43.5
8.17	1	.8	.8	44.4
8.42	1	.8	.8	45.2
8.92	1	.8	.8	46.0
9.00	1	.8	.8	46.8
9.25	1	.8	.8	47.6
10.00	2	1.5	1.6	49.2
10.33	2	1.5	1.6	50.8
10.42	3	2.3	2.4	53.2
10.58	1	.8	.8	54.0
10.67	3	2.3	2.4	56.5
11.00	3	2.3	2.4	58.9
11.25	1	.8	.8	59.7
12.00	2	1.5	1.6	61.3
12.17	1	.8	.8	62.1

Job Tenure	Frequency	Percent	Valid Percent	Cumulative Percent
12.25	1	.8	.8	62.9
12.33	1	.8	.8	63.7
12.42	1	.8	.8	64.5
12.50	4	3.0	3.2	67.7
12.67	2	1.5	1.6	69.4
12.75	1	.8	.8	70.2
12.83	1	.8	.8	71.0
12.92	1	.8	.8	71.8
13.00	2	1.5	1.6	73.4
13.17	1	.8	.8	74.2
13.25	2	1.5	1.6	75.8
13.33	1	.8	.8	76.6
13.50	1	.8	.8	77.4
14.00	1	.8	.8	78.2
14.33	3	2.3	2.4	80.6
14.42	3	2.3	2.4	83.1
14.50	1	.8	.8	83.9
15.25	1	.8	.8	84.7
15.75	1	.8	.8	85.5
15.92	1	.8	.8	86.3
17.00	1	.8	.8	87.1
17.50	1	.8	.8	87.9
17.67	1	.8	.8	88.7
18.00	3	2.3	2.4	91.1
19.00	1	.8	.8	91.9
20.08	1	.8	.8	92.7
20.58	1	.8	.8	93.5
22.25	2	1.5	1.6	95.2
22.33	1	.8	.8	96.0
23.50	1	.8	.8	96.8
24.25	1	.8	.8	97.6
24.33	1	.8	.8	98.4
24.42	1	.8	.8	99.2
30.00	1	.8	.8	100.0
Total	124	93.2	100.0	
Missing	9	6.8		
Total	133	100.0		

Table 3.4: Job tenure of respondents (mean and standard deviation)

Valid Responses (N = 124)	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Std. Error	Statistic
Job Tenure of Respondents	.17	30.00	9.6952	.58434	6.50697

The job tenure of respondents is presented in Tables 3.3 and 3.4 with respect to the distribution, mean and standard deviation of the variable. As shown in the tables above, the minimum job tenure reported by the respondents was around two months and the maximum was thirty years. The mean job tenure of the respondents was 9.7 years with a standard deviation (SD) of 6.5 years. Respondents with job tenure of ten years or longer had a slight majority that was represented by 52.4 percent of the sample. Only ten respondents were employed at the selected company for twenty years or longer representing around eight percent of the sample.
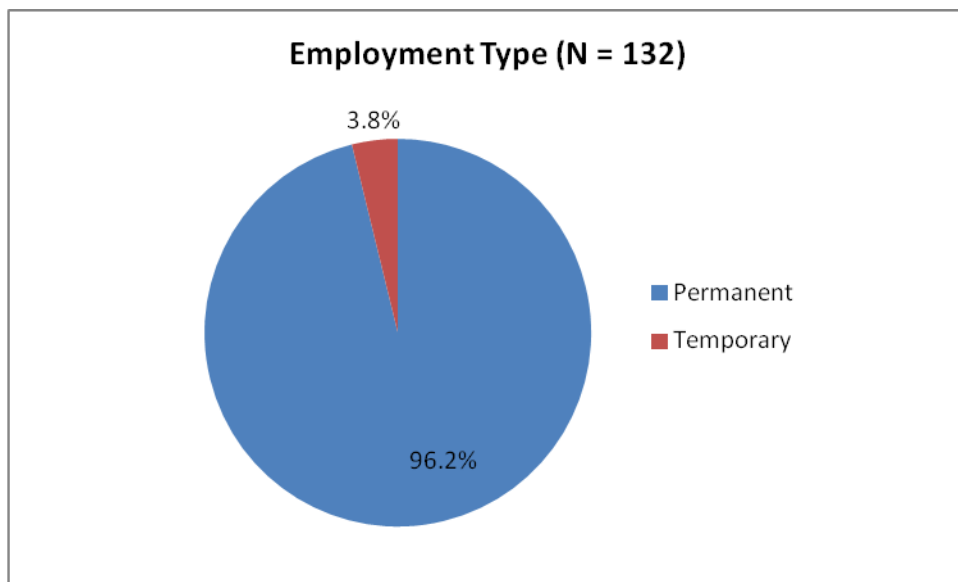
Figure 3.5: Employment type of respondents

As illustrated in Figure 3.5, the overwhelming majority of the respondents was employed by the selected company on a permanent basis. Only five employees were employed on a temporary basis accounting for less than five percent of the sample.
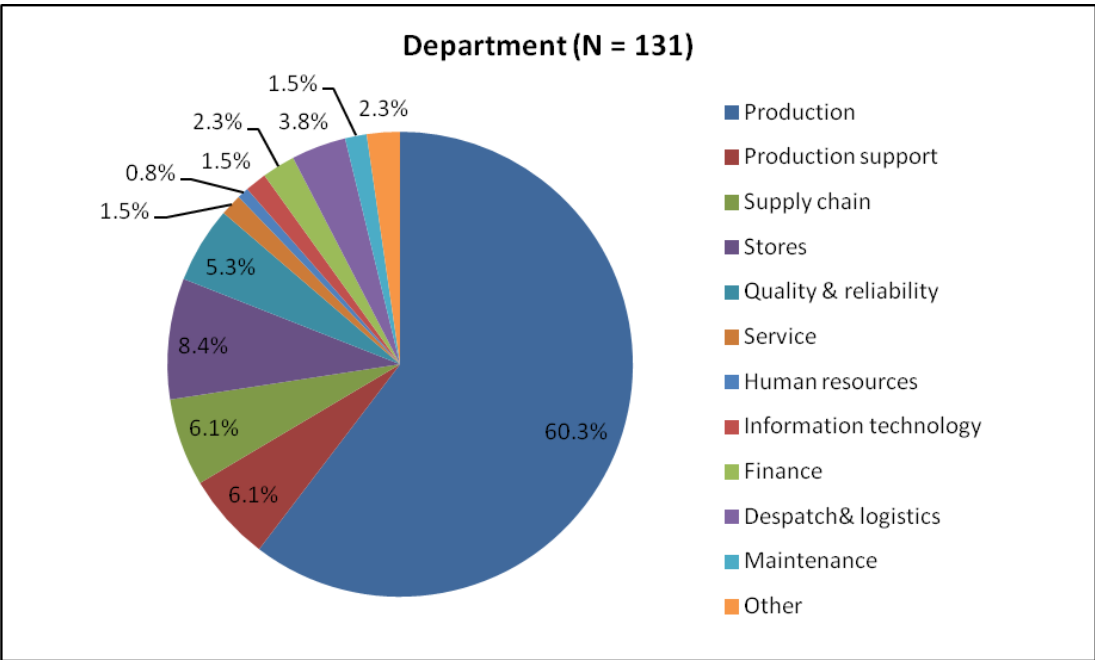
Figure 3.6: Department of respondents

As illustrated in Figure 3.6, the majority of the respondents were employed in the production department. The production department accounted for 60.3 percent of the respondents, while the production support functions represented an additional 6.1 percent of the sample. Supply chain, stores and quality functions were shared amongst the production and engineering departments and accounted for 19.8 percent of the respondents. The rest of the department groupings were not directly related to the production functions and represented about 13.7 percent of the respondents.
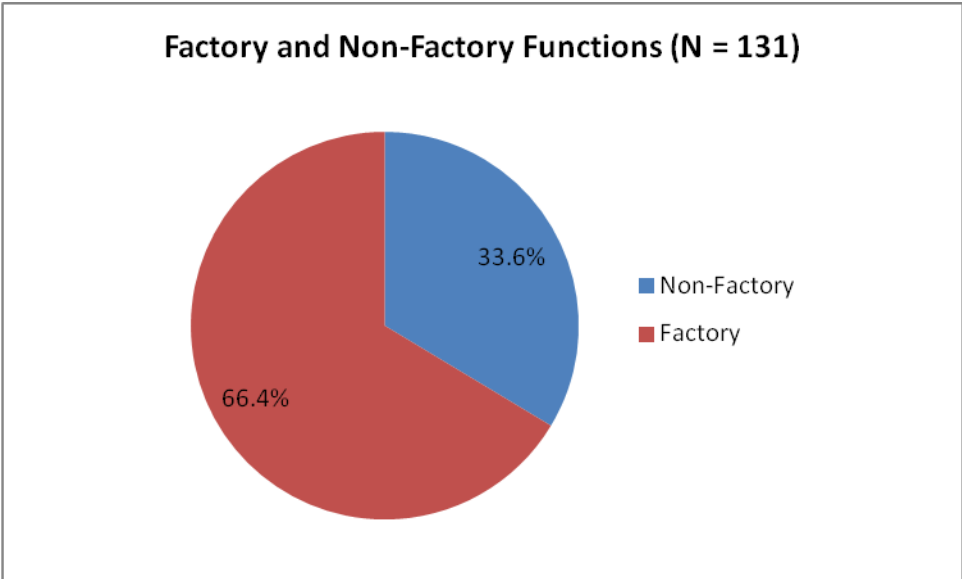
Figure 3.7: Factory and non-factory functions of respondents

As illustrated in Figure 3.7, the majority of the respondents were employed in the factory where all manufacturing functions were performed. The manufacturing plant comprised the production and production support departments and employed a combined 66.4 percent of the respondents. None of the other departments were directly involved in the activities of the manufacturing plant and were therefore viewed as non-factory functions which accounted for 33.6 percent of the respondents.

Table 3.5: Importance of family to respondents (N = 130)

Importance of Family	Frequency	Percent	Valid Percent	Cumulative Percent
Very important	122	91.7	93.8	93.8
Rather important	7	5.3	5.4	99.2
Neither important nor unimportant	1	.8	.8	100.0
Total	130	97.7	100.0	
Missing	3	2.3		
Total	133	100.0		

As shown in Table 3.5, over 99 percent of the respondents regarded family as either very important or rather important. Less than one percent of the respondents regarded family as neither important nor unimportant. The results identified family as the most important facet of life for the respondents.

Table 3.6: Importance of friends to respondents (N = 118)

Importance of Friends	Frequency	Percent	Valid Percent	Cumulative Percent
Very important	17	12.8	14.4	14.4
Rather important	60	45.1	50.8	65.3
Neither important nor unimportant	16	12.0	13.6	78.8
Not very important	22	16.5	18.6	97.5
Not at all important	3	2.3	2.5	100.0
Total	118	88.7	100.0	
Missing	15	11.3		
Total	133	100.0		

As shown in Table 3.6, just over 65 percent of the respondents regarded friends as either very important or rather important. Respondents in the next cohort rated friends as neither important nor unimportant and accounted for 13.6 percent of the sample responses. The last two groupings of respondents regarded friends as not very important or not at all important and accounted for around 21 percent of the sample. According to the results, the respondents viewed family as significantly more important than friends.

Table 3.7: Importance of religion to respondents (N = 122)

Importance of Religion	Frequency	Percent	Valid Percent	Cumulative Percent
Very important	93	69.9	76.2	76.2
Rather important	21	15.8	17.2	93.4
Neither important nor unimportant	4	3.0	3.3	96.7
Not at all important	4	3.0	3.3	100.0
Total	122	91.7	100.0	
Missing	11	8.3		
Total	133	100.0		

As shown in Table 3.7, over 93 percent of the respondents regarded religion as either very important or rather important. Only 6.6 percent of the respondents regarded religion as neither important nor unimportant or not at all important. According to the results, the respondents viewed religion as less important than family, but more important than friends.

Table 3.8: Importance of work to respondents (N = 123)

Importance of Work	Frequency	Percent	Valid Percent	Cumulative Percent
Very important	79	59.4	64.2	64.2
Rather important	38	28.6	30.9	95.1
Neither important nor unimportant	3	2.3	2.4	97.6
Not very important	2	1.5	1.6	99.2
Not at all important	1	.8	.8	100.0
Total	123	92.5	100.0	
Missing	10	7.5		
Total	133	100.0		

As shown in Table 3.8, over 95 percent of the respondents regarded work as either very important or rather important. Respondents in the next cohort rated work as neither important nor unimportant and accounted for 2.4 percent of the sample. The last two groupings of respondents regarded work as not very important or not at all important and accounted for a further 2.4 percent of the sample. According to the results, the respondents viewed work as less important than family, but more important than religion and friends. However, religion is rated higher than work when considering only the "very important" scale.

Table 3.9: Relationship with co-workers (N = 128)

Co-worker Relationship	Frequency	Percent	Valid Percent	Cumulative Percent
Very unsatisfied	3	2.3	2.3	2.3
Unsatisfied	2	1.5	1.6	3.9
Neutral	29	21.8	22.7	26.6
Satisfied	59	44.4	46.1	72.7
Very satisfied	34	25.6	26.6	99.2
Not applicable	1	.8	.8	100.0
Total	128	96.2	100.0	
Missing	5	3.8		
Total	133	100.0		

As shown in Table 3.9, almost 73 percent of the respondents were either satisfied or very satisfied with their relationships with co-workers. Less than four percent of the respondents were unsatisfied or very unsatisfied with their relationships with co-workers. The respondents that described their relationships with co-workers as neutral accounted for 22.7 percent of the sample.

Table 3.10: Relationship with supervisors (N = 128)

Supervisor Relationship	Frequency	Percent	Valid Percent	Cumulative Percent
Very unsatisfied	4	3.0	3.1	3.1
Unsatisfied	6	4.5	4.7	7.8
Neutral	28	21.1	21.9	29.7
Satisfied	58	43.6	45.3	75.0
Very satisfied	28	21.1	21.9	96.9
Not applicable	4	3.0	3.1	100.0
Total	128	96.2	100.0	
Missing	5	3.8		
Total	133	100.0		

As shown in Table 3.10, around 67 percent of the respondents were either satisfied or very satisfied with their relationships with supervisors. The respondents that were unsatisfied or very unsatisfied with their relationships with supervisors accounted for 7.8 percent of the sample. This demonstrated that the percentage of respondents that were unsatisfied with supervisors doubled compared to co-workers. The respondents that described their relationships with supervisors as neutral accounted for 21.9 percent of the sample.

Table 3.11: Relationship with subordinates (N = 125)

Subordinate Relationship	Frequency	Percent	Valid Percent	Cumulative Percent
Very unsatisfied	4	3.0	3.2	3.2
Unsatisfied	8	6.0	6.4	9.6
Neutral	32	24.1	25.6	35.2
Satisfied	52	39.1	41.6	76.8
Very satisfied	19	14.3	15.2	92.0
Not applicable	10	7.5	8.0	100.0
Total	125	94.0	100.0	
Missing	8	6.0		
Total	133	100.0		

As shown in Table 3.11, around 57 percent of the respondents were either satisfied or very satisfied with their relationships with subordinates. The respondents that were unsatisfied or very unsatisfied with their relationships with subordinates accounted for 9.6 percent of the sample. According to the results, the percentage of respondents that were unsatisfied with subordinates was higher compared to co-workers and supervisors. More than a quarter of the respondents described their relationships with subordinates as neutral. According to the results, the relationships with co-workers, supervisors and subordinates were characterised by high levels of neutral responses. This may suggest that participants were not willing to respond to the questions due to sensitivities or suspicions about the study.

3.3.4 Data analysis

The researcher is not an expert in statistics and therefore contacted the statistics department of Cape Peninsula University of Technology (CPUT) for assistance with data analysis. Statistics techniques were selected in consultation with a statistician to ensure that the correct tests were used to evaluate the survey data. The selection criteria for the statistics tests were based on the hypothesis, research design and type of data in the present study. Statistical Package for Social Science (SPSS) version 23.0 was used to analyse the research data. Meaningful summaries of the individual survey responses were generated in SPSS for all the variables in the present study. The frequency distributions displayed the number of responses as well as the percentages of participants in each cohort by means of tables and graphs. Descriptive statistics such as the mean, standard deviation, minimum and maximum scores of the sample were calculated to provide further summaries of the quantitative data.

The construct validity of the MBI-GS was assessed in the present study to determine the adequacy of the instrument as a burnout metric. Peter (1981: 134) refers to construct validity as vertical correspondence between conceptualisation and operationalisation of the construct. The above author defines construct validity as the degree to which a measure assesses the construct it is purported to assess. Factor analysis was conducted to determine if the factor structure of the sample in the present study matches the three subscales of the MBI-GS, namely exhaustion, cynicism and professional efficacy (Maslach *et al.*, 1996: 20). As suggested by Torkzadeh and Dhillon (2002: 191-192), only items with factor loadings at 0.3 or above were retained in the present study and none of the items loaded on multiple factors in the final model. After multiple iterations in SPSS, the results from the factor analysis demonstrated a two-dimensional solution with the MBI-GS items loading on

two factors, namely exhaustion/cynicism and professional efficacy. Cronbach's Alpha coefficient was calculated to determine the internal consistency and reliability of the MBI-GS subscales. As recommended by Nunnally and Bernstein (1994: 224), the present study regarded a Cronbach's Alpha coefficient greater than 0.7 as an adequate indicator of internal consistency. The procedure and outcomes of the factor analysis are discussed in more detail in the next section.

In order to compare group means, a t-test was performed to test for differences in burnout scores between means of demographic and work related variables, namely gender (V1) and employee type (V11). Descriptive statistics were generated to provide additional information regarding the respondents in these cohorts. The results were interpreted based on a significance (p) threshold of 0.05 for both the Levene's test (Sig.) as well as the t-test (Sig. 2-tailed). When $p > 0.05$ for the Levene's test, equal variances are assumed and results in the top row are selected, else equal variances are not assumed and the results in the bottom row are selected. On the other hand, $p \leq 0.05$ for the t-test demonstrates a statically significant difference between the group means, whereas $p > 0.05$ demonstrates no statically significant difference between the groupings.

While the t-test is suitable for testing the means of two groups, an analysis of variance (ANOVA) is capable of comparing the means of two or more groups. As a result, ANOVA tests were performed to compare the differences in burnout (exhaustion/cynicism and professional efficacy) scores between means of demographic and work related variables, namely marital status (V3), education level (V5), department (V12), factory/non-factory staff and turnover intention (V32-V34). The mean, standard deviation and standard error were calculated to provide additional information regarding the respondents in these cohorts. The results were interpreted based on a significance (p) threshold of 0.05 for the one-way ANOVA. While $p \leq 0.05$ demonstrates a statistically significant difference between the group means, $p > 0.05$ demonstrates no statistically significant difference between the groupings. Where the results revealed statistically significant differences in burnout scores between group means, a Bonferroni post hoc test was performed to identify the specific groups that were affected. However, post hoc tests are not required when an ANOVA is used to compare the means of only two groups.

The present study preferred the Spearman's correlation coefficient over the Pearson coefficient, because the constructs failed to satisfy the requirement for normality and some variables were assessed on ordinal scales. Spearman's correlation coefficient

was used to test the relationship between the burnout dimensions and variables of interest, namely age (V2), number of children (V4), job tenure (V10), life aspects (V6-V9) and important stakeholder relationships (V13-V15). Additionally, the Spearman's correlation coefficient was used to assess the relationship between burnout and turnover intention. The analysis examined the strength and direction of the association between the burnout dimensions (exhaustion/cynicism and professional efficacy) and turnover intention (V32-V34). The present study accepted that correlations were practically significant for $r \geq 0.25$ and $p < 0.05$.

3.3.5 Factor structure of the MBI-GS

Principal component analysis using varimax rotation with Kaiser normalisation was used to determine if the factor structure in the present study corresponded to the three factor structure of the MBI-GS as proposed by Maslach *et al*. (1996: 20). According to these authors, the MBI-GS has sixteen items that are measured on three subscales, namely exhaustion, cynicism and professional efficacy. The researcher did not specify the number of factors during the initial factor analysis, but allowed SPSS to select how many factors to extract during the analysis. Four factors with eigenvalues ≥ 1.00 were extracted and accounted for 67.8 percent of the variance. As discussed above, the three factor structure of the MBI-GS is well known and commonly accepted in the literature. Consequently, the researcher repeated the factor analysis, but specified only three factors in the extraction method.

Table 3.12: Rotated factor loadings (three factors)

MBI-GS Items	Factor 1 (EX/CY)	Factor 2 (PE)	Factor 3 (CY)
I feel emotionally drained from my work	.866		
I feel used up at the end of the workday	.853		
I feel tired when I get up in the morning and have to face another day on the job	.857		
Working all day is really a strain for me	.794		
I can effectively solve the problems that arise in my work		.600	
I feel burned out from my work	.860		
I feel I am making an effective contribution to what this organization does		.709	
I have become less interested in my work since I started this job	.686		
I have become less enthusiastic about my work	.710		
In my opinion I am good at my job		.780	
I feel exhilarated (excited) when I accomplish something at work		.751	
I have accomplished (achieved) many worthwhile things in this job		.560	

MBI-GS Items	Factor 1 (EX/CY)	Factor 2 (PE)	Factor 3 (CY)
I just want to do my job and not be bothered	.570		
I do not believe my work contributes anything			.884
I doubt the significance (importance) of my work			.903
At my work, I feel confident that I am effective at getting things done		.703	

Some researchers have argued for factor loadings greater than 0.4 (e.g. Maslach *et al.*, 1996: 10), but many others have accepted 0.3 as the threshold for factor loadings (e.g. Torkzadeh & Dhillon, 2002: 191-192; Leone, Huibers, Knottnerus & Kant, 2007: 620). Only items with factor loadings that reached the threshold $r \geq 0.30$ were retained in the present study and are displayed in Table 3.12. The results from the factor analysis produced three factors that incorporated all sixteen items of the MBI-GS. Factor one comprised of eight items, five from the exhaustion subscale and three from the cynicism subscale, and was labelled exhaustion/cynicism. The second factor included six items from the professional efficacy subscale and was labelled accordingly. Factor three was labelled cynicism, but included only two items (V29-30) from this subscale. As shown in Table 3.13, the results demonstrated a practically significant ($r = -0.25$) correlation between exhaustion/cynicism (factor 1) and cynicism (factor 3). According to the results in Table 3.14, Cronbach's Alpha coefficient was above 0.7 for all three factors and therefore demonstrated sufficient internal consistency for the MBI-GS subscales.

Table 3.13: Factor correlations (three factors)

	Factor 1	Factor 2	Factor 3
Factor 1	.958	-.163	.236
Factor 2	.138	.983	.118
Factor 3	-.251	-.080	.965

Table 3.14: Reliability statistics (three factors)

	N	Number of Items	Cronbach's Coefficient
Factor 1 (EX/CY)	110	8	.905
Factor 2 (PE)	113	6	.740
Factor 3 (CY)	124	2	.820

The practically significant correlation between some factors and the fact that cynicism consisted of only two items presented some risk for the reliability of the MBI-GS in the present study. In an attempt to improve the reliability of the instrument, the researcher performed a third factor analysis, but specified only two factors to determine whether cynicism items V29 and V30 would load on the extracted factors. The factor loadings of all sixteen MBI-GS items reached the significance threshold $r \geq 0.30$ and are displayed in Table 3.15. Both cynicism items V29 and V30 loaded on the exhaustion/cynicism factor, whereas the professional efficacy factor retained its original items.

Table 3.15: Rotated factor loadings (two factors)

MBI-GS Items	Factor 1 (EX/CY)	Factor 2 (PE)
I feel emotionally drained from my work	.838	
I feel used up at the end of the workday	.828	
I feel tired when I get up in the morning and have to face another day on the job	.829	
Working all day is really a strain for me	.824	
I can effectively solve the problems that arise in my work		.605
I feel burned out from my work	.842	
I feel I am making an effective contribution to what this organization does		.689
I have become less interested in my work since I started this job	.686	
I have become less enthusiastic about my work	.728	
In my opinion I am good at my job		.782
I feel exhilarated (excited) when I accomplish something at work		.755
I have accomplished (achieved) many worthwhile things in this job		.563
I just want to do my job and not be bothered	.605	
I do not believe my work contributes anything	.404	
I doubt the significance (importance) of my work	.405	
At my work, I feel confident that I am effective at getting things done		.706

Factor one (exhaustion/cynicism) incorporated ten items, five from the exhaustion subscale and five from the cynicism subscale. The second factor (professional efficacy) included the six items of the professional efficacy subscale. As shown in Table 3.16, the results demonstrated a weak ($r = \pm0.183$) correlation between factors which is indicative of unique and independent subscales. According to the results in Table 3.17, Cronbach's Alpha coefficient was above 0.7 for both factors and therefore demonstrated sufficient internal consistency for the two MBI-GS subscales. Although

the reliability of the 10-item exhaustion/cynicism factor is lower than before, it is significantly higher than the 2-item cynicism factor that it absorbed.

Table 3.16: Factor correlations (two factors)

	Factor 1	Factor 2
Factor 1	.983	-.183
Factor 2	.183	.983

Table 3.17: Reliability statistics (two factors)

	N	Number of Items	Cronbach's Coefficient
Factor 1 (EX/CY)	106	10	.886
Factor 2 (PE)	113	6	.740

The factor analysis produced a two factor solution for the MBI-GS where exhaustion and cynicism formed one factor and the second factor comprised professional efficacy. Although many studies found evidence that a three factor structure is the best model for the MBI-GS (e.g. Taris *et al.*, 1999: 233; Schutte *et al.*, 2000: 63; Richardsen & Martinussen, 2005: 296), some researchers found support for a two factor MBI structure (e.g. Brookings *et al.*, 1985: 149; Dignam, Barrera & West, 1986: 183). Furthermore, some studies do not consider professional efficacy a component of burnout and therefore support a unique two factor structure that include exhaustion and cynicism (e.g. Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2001: 84; Qiao & Schaufeli, 2011: 89-90, 103). As demonstrated in the present study, all sixteen items were represented in the two factors of the MBI-GS and the internal consistency of the instrument was sufficient. As a result, the two factor MBI-GS was accepted as a valid burnout measure in the present study.

3.4   Ethics considerations

It is important that research is conducted in an ethical manner to ensure that it doesn't impact negatively on society or the environment. While there is potential for harm in most studies, the researcher has made reasonable attempts to avoid or mitigate harmful outcomes. The researcher has submitted an application for ethics clearance and has received the required approval from the business ethics committee of CPUT. All research activities were delayed until the researcher received written research approval from the selected company. The researcher has complied and will continue to comply with the requirements of the selected company including minimum

work disruption, non-disclosure of company name and also confidentiality of company documents. The study guaranteed anonymity and confidentiality to respondents. It is not possible to link the names of the respondents to individual responses or to identify participants, because no names were collected during the survey. Participants were informed of the purpose, procedure and duration of the research. Data collected from the survey has only been used for the purpose of this study and is stored by the researcher in Cape Town, South Africa.

CHAPTER FOUR
RESULTS

4.1   Introduction

The objective of the present study is to evaluate the relationship between burnout and turnover intention amongst employees at a selected electronics manufacturing company in South Africa. This chapter presents the quantitative results obtained after application of the research design and methodology discussed in the previous chapter. Firstly, the descriptive statistics as well as categorisation of burnout and turnover intention will be presented. Secondly, the results related to correlations of burnout with demographic variables, importance of life aspects and stakeholder relationships will be considered. Next, the results that relate to the relationship between burnout and turnover intention will be discussed. Finally, a summary of the findings will be presented in the concluding section of this chapter.

4.2   Burnout levels

Maslach *et al.* (1996: 20) proposed a three factor structure for the MBI-GS that includes sixteen items on three subscales; namely exhaustion, cynicism and professional efficacy. As discussed in chapter three, the factor analysis in the present study revealed a two factor solution that includes sixteen items on two subscales, namely exhaustion/cynicism and professional efficacy. The numerical cut-off points for the burnout dimensions were determined by arbitrarily dividing the subscale scores into equal tertiles as recommended by Maslach *et al.* (1996: 5). Burnout scores are considered high if in the upper tertile of the distribution, moderate if in the middle tertile and low if in the lower tertile. The mean, standard deviation, minimum and maximum scores of the present sample are presented in Tables 4.1 and 4.2 for the burnout tertiles.

Table 4.1: Exhaustion/Cynicism cut-off points

Tertiles (EE/CY)	N	Minimum	Maximum	Mean	Standard Deviation
Lower Third (Low)	41	0.00	1.00	0.56	0.29
Middle Third (Moderate)	42	1.10	2.70	1.96	0.43
Upper Third (High)	41	2.90	6.00	3.92	0.85

Table 4.2: Professional efficacy cut-off points

Tertiles (PE)	N	Minimum	Maximum	Mean	Standard Deviation
Lower Third (Low)	41	0.00	4.83	3.58	1.14
Middle Third (Moderate)	42	4.83	5.50	5.10	0.20
Upper Third (High)	41	5.50	6.00	5.85	0.17

As demonstrated in Table 4.1, the lower tertile of the exhaustion/cynicism subscale ranges from a mean score of 0.00 to 1.00, while the moderate tertile ranges from 1.10 to 2.70 and the high tertile from 2.90 to 6.00. Similarly, Table 4.2 shows that the lower tertile of the professional efficacy subscale ranges from a mean score of 0.00 to 4.83, while the moderate tertile ranges from 4.83 to 5.50 and the high tertile from 5.50 to 6.00. The mean, standard deviation, minimum and maximum scores of the present sample are presented in Table 4.3 for the burnout subscales.

Table 4.3: Burnout dimensions (mean and standard deviation)

Descriptive Statistics	N	Minimum	Maximum	Mean	Standard Deviation
Exhaustion/Cynicism	124	0.00	6.00	2.15	1.49
Professional Efficacy	124	0.00	6.00	4.84	1.16

As shown in Table 4.3, the mean score of the present sample is 2.15 (SD 1.49) for the exhaustion/cynicism dimension and 4.84 (SD 1.16) for the professional efficacy dimension. According to the cut-off points in Tables 4.1 and 4.2, the respondents in the present study experience moderate levels of exhaustion/cynicism and professional efficacy. As recommended by Maslach *et al.* (1996: 5), subscale scores in the present study are considered separately and not combined into a single total score. Low scores on the exhaustion/cynicism subscale combined with high scores on the professional efficacy subscale reflect low levels of burnout. Moderate scores on the exhaustion/cynicism subscale combined with moderate scores on the professional efficacy subscale reflect moderate levels of burnout. High scores on the exhaustion/cynicism subscale combined with low scores on the professional efficacy subscale reflect high levels of burnout. As discussed above, both the exhaustion/cynicism and professional efficacy subscales are at moderate levels. Consequently, the respondents in the present study experience moderate burnout.

The upper tertile of the exhaustion/cynicism subscale and the lower tertile of the professional efficacy subscale are central in demonstrating high burnout conditions. Although the combined sample has moderate burnout, further analysis is important to determine if respondents in any of the exhaustion/cynicism categories experience high burnout. As a result, descriptive statistics were generated to determine the level of professional efficacy in each of the exhaustion/cynicism categories. The professional efficacy mean scores and standard deviation in each of the exhaustion/cynicism tertiles are presented in Table 4.4.

Table 4.4: Professional efficacy in exhaustion/cynicism tertiles

EE/CY Tertile	N	Mean (PE)	Standard Deviation	PE Tertile
Lower Third (Low)	41	4.93	1.17	Moderate
Middle Third (Moderate)	42	4.85	1.16	Moderate
Upper Third (High)	41	4.75	1.16	Low

Based on the results in Table 4.4, the respondents in the lower (M = 4.93, SD = 1.17) and middle tertiles (M = 4.85, SD = 1.16) of the exhaustion/cynicism subscale experience moderate levels of professional efficacy. Respondents in the upper tertile of the exhaustion/cynicism subscale experience low levels (M = 4.75, SD = 1.16) of professional efficacy. According to the results, respondents in the upper tertile of the exhaustion/cynicism subscale or 33 percent of the combined sample experience high levels of burnout.

4.3   Turnover intention levels

As proposed by Brough and Frame (2004), the present study used a three item instrument to measure the level of turnover intention of the respondents at the selected company. Cronbach's alpha (α = 0.800) demonstrated that the turnover intention scale has good internal consistency. Furthermore, the high item-to-total correlations in Table 4.5 show that all three items belong in the scale. The results indicate that the reliability of the instrument will be significantly lower if any of the items are removed from the scale.

Table 4.5: Turnover intention (item-total statistics)

Valid Responses (N = 123)	Scale Mean if Item Deleted	Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How frequently have you considered leaving your job in the last twelve months?	4.95	5.604	0.691	0.680
How frequently do you actively look for jobs outside the company?	5.41	6.374	0.590	0.784
How likely are you to leave your job in the next twelve months?	4.86	5.153	0.666	0.710

Similar to burnout, the numerical cut-off points for turnover intention were determined by arbitrarily dividing the subscale scores into equal tertiles. Turnover intention scores are considered high if in the upper tertile of the distribution, moderate if in the middle tertile and low if in the lower tertile. The mean, standard deviation, minimum and maximum scores of the present sample are presented in Table 4.6 for the turnover intention tertiles.

Table 4.6: Turnover intention cut-off points

Tertiles (TI)	N	Minimum	Maximum	Mean	Standard Deviation
Lower Third (Low)	41	1.00	2.00	1.30	0.31
Middle Third (Moderate)	41	2.00	3.00	2.43	0.33
Upper Third (High)	41	3.00	5.00	3.88	0.58

As demonstrated in Table 4.6, the lower tertile of the turnover intention subscale ranges from a mean score of 1.00 to 2.00, while the moderate tertile ranges from 2.00 to 3.00 and the high tertile from 3.00 to 5.00. The mean, standard deviation, minimum and maximum scores of the present sample are presented in Table 4.7 for the turnover intention subscale. As shown in Table 4.7, the mean turnover intention score for the present sample is 2.54 (SD 1.14). According to the cut-off points in Table 4.6, the respondents in the present study experience moderate levels of turnover intention.

Table 4.7: Turnover intention (mean and standard deviation)

Descriptive Statistics	N	Minimum	Maximum	Mean	Standard Deviation
Turnover Intention	123	1.00	5.00	2.54	1.14
How frequently have you considered leaving your job in the last twelve months?	123	1.00	5.00	2.66	1.32
How frequently do you actively look for jobs outside the company?	123	1.00	5.00	2.20	1.25
How likely are you to leave your job in the next twelve months?	123	1.00	5.00	2.75	1.46

4.4 Relationship between burnout and demographic variables

This section presents the results that characterise the relationship between the burnout dimensions and demographic variables. The relationship was evaluated by means of independent samples t-tests, one-way ANOVA and Spearman's correlation tests. Independent samples t-tests were conducted to compare the mean scores of the burnout subscales across different demographic groups; namely gender (V1) and employee type (V11). The results for the t-tests are presented in Tables 4.8 and 4.9 for the exhaustion/cynicism and professional efficacy subscales respectively.

Table 4.8: Relationship between EX/CY and demographic variables (t-test)

T-Test Exhaustion/Cynicism	Descriptive Statistics			t-test for Equality of Means		
	N	Mean	Standard Deviation	t	df	Sig. (2-tailed)
Male	55	1.87	1.44	-1.684	128	0.095
Female	75	2.30	1.45	-1.684	128	0.095
Permanent employee	126	2.09	1.44	-1.857	129	0.066
Temporary employee	5	3.32	1.83	-1.857	129	0.066

As demonstrated in Table 4.8, the results indicate that there are no statistically significant differences in the mean scores of the exhaustion/cynicism subscale for males (M = 1.87, SD = 1.44) versus females (M = 2.30, SD = 1.45) and permanent (M = 2.09, SD = 1.44) versus temporary staff (M = 3.32, SD = 1.83). The p-values are above the significance level (p < 0.05) and discrepancies between group means of gender and employee type are likely due to chance and not related to significant differences between cohorts.

Table 4.9: Relationship between PE and demographic variables (t-test)

T-Test Professional Efficacy	Descriptive Statistics			t-test for Equality of Means		
	N	Mean	Standard Deviation	t	df	Sig. (2-tailed)
Male	55	4.99	1.00	0.733	127	0.465
Female	74	4.85	1.13	0.733	127	0.465
Permanent employee	125	4.86	1.16	-0.642	128	0.522
Temporary employee	5	5.20	0.92	-0.642	128	0.522

Similarly, the results in Table 4.9 suggest that there are no statistically significant differences in the mean scores of the professional efficacy subscale for males (M = 4.99, SD = 1.00) versus females (M = 4.85, SD = 1.13) and permanent (M = 4.86, SD = 1.16) versus temporary staff (M = 5.20, SD = 0.92). The p-values are above the significance level (p < 0.05) and discrepancies between group means of gender and employee type are likely due to chance and not related to significant differences between cohorts.

One-way ANOVA tests were conducted to compare the mean scores of the burnout subscales across different demographic groups; namely marital status (V3), education level (V5), department (V12) and factory/non-factory workers (V35). The results for the ANOVA tests are presented in Tables 4.10 and 4.11 for the exhaustion/ cynicism and professional efficacy subscales respectively.

Table 4.10: Relationship between EX/CY and demographic variables (ANOVA)

Demographic Variable	Descriptive Statistics				ANOVA	
	Category	N	Mean	Std. Dev	F	Sig.
Marital Status	Married	75	1.95	1.42	1.124	0.351
	Cohabiting	11	2.46	1.77		
	Divorced	6	2.57	1.76		
	Separated	3	3.07	0.49		
	Widowed	3	1.04	0.86		
	Single	31	2.31	1.43		
	Total	129	2.12	1.46		
Education Level	Grade 11 or Lower	47	2.11	1.57	0.254	0.957
	Grade 12 or Equivalent	41	2.13	1.40		

Demographic Variable	Descriptive Statistics				ANOVA	
	Category	N	Mean	Std. Dev	F	Sig.
	Post School Dip/Cert	11	1.90	1.56		
	Nat/Higher Diploma	21	2.31	1.37		
	Bachelors Degree	3	1.97	0.12		
	Honours Degree	1	3.40	0.00		
	Masters Degree	2	2.60	3.11		
	Total	126	2.15	1.46		
Department	Production	79	2.46	1.58	1.664	0.090
	Production Support	7	1.80	1.39		
	Supply Chain	8	1.13	0.68		
	Stores	11	0.96	0.59		
	Quality & Reliability	7	1.70	1.23		
	Service	2	2.33	0.47		
	Human Resources	1	2.90	0.00		
	Information Tech	2	2.35	0.92		
	Finance	3	1.50	1.71		
	Despatch & Logistics	5	2.28	1.33		
	Maintenance	2	2.30	0.85		
	Other	3	1.57	1.01		
	Total	130	2.12	1.46		
Factory Worker or Not	Factory Worker	86	2.41	1.56	10.316	0.002
	Non-Factory Worker	44	1.57	1.04		
	Total	130	2.12	1.46		

The one-way ANOVA results in Table 4.10 indicate that there is a statistically significant difference in the mean scores of exhaustion/cynicism for the factory and non-factory groups (F = 10.316, p = 0.002). The ANOVA compared the means of two groups and therefore did not require any post hoc tests. According to the results, factory workers (M = 2.41, SD = 1.56) experience significantly higher levels of exhaustion/cynicism than non-factory workers (M = 1.57, SD = 1.04). Furthermore, the results demonstrate that there are no statistically significant differences in the mean scores of exhaustion/cynicism for the marital status (M = 2.12, SD = 1.46), education level (M = 2.15, SD = 1.46) and department (M = 2.12, SD = 1.46) cohorts. The p-values are above the significance level (p < 0.05) and discrepancies between group means of marital status, education level and department are likely due to chance and not related to significant differences between cohorts.

Table 4.11: Relationship between PE and demographic variables (ANOVA)

Demographic Variable	Descriptive Statistics				ANOVA	
	Category	N	Mean	Std. Dev	F	Sig.
Marital Status	Married	75	4.99	0.97	0.755	0.584
	Cohabiting	11	4.74	1.07		
	Divorced	6	4.81	1.54		
	Separated	3	5.72	0.35		
	Widowed	2	5.17	1.18		
	Single	31	4.65	1.49		
	Total	128	4.90	1.14		
Education Level	Grade 11 or Lower	46	5.04	1.04	1.329	0.250
	Grade 12 or Equivalent	41	4.62	1.22		
	Post School Dip/Cert	11	5.27	0.68		
	Nat/Higher Diploma	21	4.94	0.94		
	Bachelors Degree	3	5.39	1.06		
	Honours Degree	1	5.33	0.00		
	Masters Degree	2	6.00	0.00		
	Total	125	4.93	1.07		
Department	Production	78	4.76	1.25	0.606	0.821
	Production Support	7	4.76	1.38		
	Supply Chain	8	5.15	0.89		
	Stores	11	4.95	1.09		
	Quality & Reliability	7	5.19	0.54		
	Service	2	4.83	1.18		
	Human Resources	1	3.50	0.00		
	Information Tech	2	5.50	0.00		
	Finance	3	5.56	0.51		
	Despatch & Logistics	5	4.67	1.45		
	Maintenance	2	5.42	0.12		
	Other	3	5.67	0.58		
	Total	129	4.87	1.16		
Factory Worker or Not	Factory Worker	85	4.76	1.25	2.412	0.123
	Non-Factory Worker	44	5.09	0.92		
	Total	129	4.87	1.16		

The one-way ANOVA results in Table 4.11 indicate that there are no statistically significant differences in the mean scores of professional efficacy for the marital status (M = 4.90, SD = 1.14), education level (M = 4.93, SD = 1.07), department (M = 4.87, SD = 1.16) and factory/non-factory (M = 4.87, SD = 1.16) cohorts. The p-values are above the significance level ($p < 0.05$) and discrepancies between group means

of marital status, education level, department and factory/non-factory workers are likely due to chance and not related to significant differences between cohorts.

Spearman's rank-order correlation tests were conducted to determine the strength and direction of the relationship between burnout and demographic variables of interest; namely age (V2), children (V4) and tenure (V10). The results for the Spearman's correlation tests are presented in Table 4.12 for the exhaustion/cynicism and professional efficacy subscales. Correlations were regarded as statistically significant for $p \leq 0.05$ and $r_s \geq 0.25$. Based on the results in Table 4.12, Spearman's rho revealed no statistically significant or practically relevant relationships between the burnout dimensions and variables of interest.

Table 4.12: Relationship between burnout and demographic variables (Spearman's)

Demographic Variable	Exhaustion/Cynicism			Professional Efficacy		
	N	p^a	r_s	N	p^a	r_s
Age	113	0.161	-0.133	113	0.100	0.155
Children	108	0.256	-0.110	108	0.099	0.159
Tenure	116	0.835	-0.020	116	0.818	-0.022

a.   p-value (2-tailed) ≤ 0.05 statistically significant, $r_s \geq 0.25$ practically relevant

4.5   Relationship between burnout and importance of life aspects

Spearman's rank-order correlation tests were conducted to determine the strength and direction of the relationship between burnout and importance of life aspects; namely family (V6), friends (V7), religion (V8) and work (V9). The results for the Spearman's correlation tests are presented in Table 4.13 for the exhaustion/cynicism and professional efficacy subscales. Based on the results in Table 4.13, Spearman's rho revealed no statistically significant or practically relevant relationships between the burnout dimensions and importance of life aspects.

Table 4.13: Relationship between burnout and life aspects (Spearman's)

Variable	Exhaustion/Cynicism			Professional Efficacy		
	N	p^a	r_s	N	p^a	r_s
Importance of Family	122	0.384	0.080	122	0.376	-0.081
Importance of Friends	110	0.564	-0.056	110	0.399	-0.081
Importance of Religion	114	0.871	-0.015	114	0.980	0.002
Importance of Work	115	0.218	0.116	115	0.659	0.042

a.   p-value (2-tailed) ≤ 0.05 statistically significant, r_s ≥ 0.25 practically relevant

4.6   Relationship between burnout and stakeholder relationships

Spearman's rank-order correlation tests were conducted to determine the strength and direction of the relationship between burnout and stakeholder relationships; namely co-workers (V13), supervisors (V14) and subordinates (V15). The results for the Spearman's correlation tests are presented in Table 4.14 for the exhaustion/cynicism and professional efficacy subscales. Based on the results in Table 4.14, Spearman's rho revealed weak negative statistically significant relationships between exhaustion/cynicism and supervisor ($p < 0.001$, $r_s = -0.347$) as well as subordinate relationships ($p = 0.001$, $r_s = -0.296$). According to the results, the levels of exhaustion/cynicism experienced by respondents increase as relationships with supervisors and subordinates deteriorate. Furthermore, the results indicated a weak positive statistically significant relationship between professional efficacy and supervisor relationships ($p = 0.001$, $r_s = 0.301$). According to the results, the levels of professional efficacy experienced by respondents increase as relationships with supervisors improve. No statistically significant or practically relevant correlations were revealed between the burnout dimensions and co-worker relationships.

Table 4.14: Relationship between burnout and stakeholders (Spearman's)

Variable	Exhaustion/Cynicism			Professional Efficacy		
	N	p^a	r_s	N	p^a	r_s
Relationships Co-workers	120	0.195	-0.119	120	0.276	0.100
Relationships Supervisors	120	0.000	-0.347	120	0.001	0.301
Relationships Subordinates	117	0.001	-0.296	117	0.065	0.171

a.   p-value (2-tailed) ≤ 0.05 statistically significant, r_s ≥ 0.25 practically relevant

4.7 Relationship between burnout and turnover intention

This section presents the results that characterise the relationship between the burnout dimensions and turnover intention (V32-V34). The relationship was evaluated by means of one-way ANOVA, post hoc Bonferroni and Spearman's correlation tests. One-way ANOVA tests were conducted to compare the mean scores of turnover intention across different categories of the exhaustion/cynicism and professional efficacy subscales. The descriptive statistics and results for the ANOVA tests are presented in Table 4.15.

Table 4.15: Relationship between burnout and turnover intention (ANOVA)

Burnout Dimension	Tertile	N	Mean (TI)	Standard Deviation	ANOVA	
					F	Sig.
Exhaustion/Cynicism	Low	41	1.91	0.94	25.360	0.000
	Moderate	42	2.33	0.87		
	High	40	3.39	1.07		
Professional Efficacy	Low	41	2.57	1.22	0.139	0.871
	Moderate	42	2.58	1.08		
	High	40	2.46	1.13		

The one-way ANOVA results in Table 4.15 indicate that there are statistically significant differences in the mean scores of turnover intention for the different exhaustion/cynicism categories (F = 25.360, p < 0.001). Furthermore, the results demonstrate that there are no statistically significant differences in the mean scores of turnover intention for the different professional efficacy categories (F = 0.139, p = 0.871). The p-value is above the significance level (p < 0.05) and discrepancies between group means of the professional efficacy tertiles are likely due to chance and not related to significant differences between cohorts.

Post hoc tests using the Bonferroni correction method were conducted to determine which pairs of the exhaustion/cynicism categories revealed significant differences in turnover intention. The results of the post hoc Bonferroni tests for the exhaustion/cynicism categories are presented in Table 4.16. Post hoc tests were not required for the professional efficacy categories, because the analysis of variance revealed no statistically significant differences between the group means.

Table 4.16: Bonferroni - Turnover intention and EX/CY tertiles

Exhaustion/Cynicism Tertiles	Multiple Comparisons	Bonferroni	
		Mean Diff.	p
Low	Moderate	-0.42276	0.143
	High	-1.48110	0.000
Moderate	Low	0.42276	0.143
	High	-1.05833	0.000
High	Low	1.48110	0.000
	Moderate	1.05833	0.000

The post hoc test results in Table 4.16 indicate that there are statistically significant differences in turnover intention between the low and high (Mean Diff. = 1.48110, $p < 0.001$) as well as the moderate and high (Mean Diff. = 1.05833, $p < 0.001$) exhaustion/cynicism categories. According to the results, respondents in the higher tertile (M = 3.39, SD = 1.07) of the exhaustion/cynicism subscale experience significantly higher levels of turnover intention compared to those in the middle (M = 2.33, SD = 0.87) and lower tertiles (M = 1.91, SD = 0.94). Furthermore, the results show that there are no statistically significant differences in the turnover intention experienced by respondents in the lower and middle tertiles of the exhaustion/cynicism subscale (Mean Diff. = 0.42276, $p = 0.143$). The p-values are above the significance level ($p < 0.05$) and discrepancies between group means of the low and middle exhaustion/cynicism tertiles are likely due to chance and not related to significant differences between categories.

Spearman's rank-order correlation tests were conducted to determine the strength and direction of the relationship between burnout and turnover intention (V32-V34). The results for the Spearman's correlation tests are presented in Table 4.17 for the exhaustion/cynicism and professional efficacy subscales. Based on the results in Table 4.17, Spearman's rho revealed a moderate positive statistically significant relationship between exhaustion/cynicism and turnover intention ($p < 0.001$, $r_s = 0.542$). Furthermore, the results indicate weak to moderate statistically significant relationships between exhaustion/cynicism and the individual items of the turnover intention subscale; namely V32 ($p < 0.001$, $r_s = 0.566$), V33 ($p < 0.001$, $r_s = 0.340$) and V34 ($p < 0.001$, $r_s = 0.452$). The results demonstrate that the turnover intention of the respondents increases as the levels of exhaustion/cynicism escalate. Similarly, respondents experiencing higher levels of exhaustion/cynicism report higher job cognitions (V32), more frequent job search activities (V33) and higher likelihood of leaving the company (V34). No statistically significant or practically relevant

correlations were revealed between professional efficacy and turnover intention or any of its items.

Table 4.17: Relationship between burnout and turnover intention (Spearman's)

Variable	Exhaustion/Cynicism			Professional Efficacy		
	N	p^a	r_s	N	p^a	r_s
Turnover Intention	123	0.000	0.542	123	0.377	-0.080
V32: How frequently have you considered leaving your job in the last twelve months?	123	0.000	0.566	123	0.298	-0.095
V33: How frequently do you actively look for jobs outside the company?	123	0.000	0.340	123	0.726	-0.032
V34: How likely are you to leave your job in the next twelve months?	123	0.000	0.452	123	0.286	-0.097

a. p-value (2-tailed) ≤ 0.05 statistically significant, r_s ≥ 0.25 practically relevant

4.8   Summary of findings

This section presents a summary of the quantitative results obtained by means of the research design and methodology described in Chapter Three. Results that can assist in answering the research questions of the present study will be discussed in more detail in the next chapter.

1. The respondents in the present study experience moderate levels of exhaustion/cynicism and professional efficacy that can be categorised as moderate burnout (Maslach *et al*., 1996).

2. Professional efficacy levels of the respondents in the upper exhaustion/cynicism category can be classified as low. This suggests that the group with high mean scores for exhaustion/cynicism has low mean scores for professional efficacy and can therefore be classified as high burnout according to Maslach *et al*. (1996).

3. The respondents in the present study experience moderate levels of turnover intention, according to arbitrarily derived cut-off points.

4. Gender and employee type do not contribute to statistically significant differences in the mean scores of exhaustion/cynicism or professional efficacy.

5. The mean scores of exhaustion/cynicism are significantly different for factory and non-factory workers. This suggests that factory workers experience significantly higher levels of exhaustion/cynicism compared to non-factory workers.

6. Marital status, education level and department cohorts do not contribute to statistically significant differences in the mean scores of exhaustion/cynicism.

7. The mean scores of professional efficacy are not significantly different for marital status, education level, department and factory/non-factory workers.

8. Burnout displays no statistically significant or practically relevant relationships with age, number of children or job tenure.

9. No statistically significant or practically relevant relationships are revealed between burnout and importance of family, friends, religion and work.

10. Exhaustion/cynicism displays weak negative statistically significant correlations with supervisor and subordinate relationships. This suggests that the levels of exhaustion/cynicism experienced by respondents increase as supervisor and subordinate relationships deteriorate.

11. Professional efficacy displays a weak positive statistically significant correlation with supervisor relationships. This suggests that the levels of professional efficacy experienced by respondents increase as the relationships with supervisors improve.

12. No statistically significant or practically relevant relationships are revealed between the burnout dimensions and co-worker relationships.

13. The mean scores of turnover intention are significantly different for the low and high as well as the moderate and high exhaustion/cynicism categories. This suggests that respondents in the upper exhaustion/cynicism category experience significantly higher levels of turnover intention compared to those in the lower and middle categories. The mean scores of turnover intention are not significantly different for the lower and middle categories of the exhaustion/cynicism subscale.

14. Professional efficacy categories do not contribute to statistically significant differences in the mean scores of turnover intention.

15. Exhaustion/cynicism displays a moderate positive statistically significant relationship with turnover intention. This suggests that the levels of turnover intention experienced by respondents increase as exhaustion/cynicism increases.

16. Exhaustion/cynicism reveals a moderate positive statistically significant relationship with V32 ("How frequently have you considered leaving your job in the last twelve months?"). This suggests that turnover cognitions of respondents increase as exhaustion/cynicism increases.

17. Exhaustion/cynicism reveals a weak positive statistically significant relationship with V33 ("How frequently do you actively look for jobs outside the company?").

This suggests that job search activities of respondents increase as exhaustion/cynicism increases.

18. Exhaustion/cynicism reveals a moderate positive statistically significant relationship with V34 ("How likely are you to leave your job in the next twelve months?"). This suggests that the likelihood of respondents leaving the company increases as exhaustion/cynicism escalates.

19. Professional efficacy reveals no statistically significant or practically relevant relationships with turnover intention or any of its items.

CHAPTER FIVE
DISCUSSION AND CONCLUSIONS

5.1 Introduction

Chapter 1 described the research context within which the relationship between burnout and turnover intention was evaluated at the selected company. The problem statement demonstrated that voluntary turnover increased significantly at the selected company. Chapter 2 critically reviewed previous literature and provided the theoretical framework to describe the relationship between burnout and turnover intention. Furthermore, the literature review contributed to the development of conceptual models for burnout and turnover intention as well as the relationship between the variables. Chapter 3 demonstrated the suitability of the cross sectional quantitative methodology that was employed to evaluate the relationship between burnout and turnover intention. Chapter 4 presented the results that were obtained after application of a cross sectional quantitative methodology. The cut-off points for burnout and turnover intention were determined as well as the strength and direction of the association between the variables.

The remainder of this chapter will discuss the results obtained in chapter 4 in order to address the research questions of the present study. Discussion of the results will uncover the implications of the findings for the research objectives. Section two will discuss the results in terms of the research questions outlined in chapter 1. The next section will describe the academic as well as the practical contributions of the research. Section four will consider the limitations of the study and propose recommendations for further research. The final section of this chapter will discuss the conclusions reached with respect to the hypothesis of the study.

5.2 Research questions

The research hypothesis in the present study is based on the relationship between burnout and turnover intention amongst employees at a selected electronics manufacturing company in South Africa. It was proposed that burnout is positively related to turnover intention and, as a result, employees experiencing high burnout will be more likely to leave the company compared to those with low burnout. The research questions in chapter 1 deals with the relationship between the dependent and independent variables and will be used to test the hypothesis in the present study. In order to address the different components of the hypothesis, each research question will be discussed below.

5.2.1   What is the level of burnout amongst employees at the selected company?

The present sample displays a moderate mean score of 2.15 (SD = 1.49) on the exhaustion/cynicism subscale and 4.84 (SD = 1.16) on the professional efficacy subscale which may be classified as moderate burnout (Maslach *et al.*, 1996: 5). This finding demonstrates that the level of burnout experienced by employees at the selected company is average and within reasonable limits. This finding, however, is somewhat unexpected, because the selected company has a history of continuous restructuring and downsizings that may contribute to significant burnout levels of employees. Previous studies confirmed the relationship between burnout and external organisational factors, such as retrenchments, mergers and downsizings (e.g. Jennings, 2008: 6). Retrenchments, mergers and downsizings often result in layoffs that may lead to higher job demands and lower job resources. Previous studies found evidence that increased job demands and decreased job resources predict burnout (e.g. Maslach *et al.*, 2001: 407-409; Maslach & Goldberg, 1998: 65). The researcher proposes that this unexpected finding may be as a result of hardiness, due to high levels of unemployment and poverty in South Africa, which may encourage employees to develop coping mechanisms for burnout and to display satisfaction with working conditions. Similar patterns have been observed by Ndetei *et al.* (2008: 202) in a sample of employees at a Kenyan psychiatric hospital. Furthermore, it is speculated that methodological errors may have influenced the reporting of burnout levels at the selected company, because the burnout instrument was self-administered and therefore subject to linguistic and interpretational limitations.

Although the overall sample revealed moderate burnout levels, respondents in the upper tertile of the exhaustion/cynicism subscale displayed a high mean score of 3.92 (SD = 0.85) for exhaustion/cynicism and a low mean score of 4.75 (SD = 1.16) for professional efficacy which may be classified as high burnout (Maslach *et al.*, 1996: 5). This finding demonstrates that the level of burnout experienced by respondents in the upper tertile of the exhaustion/cynicism subscale is high and outside reasonable limits. Contrary to the results for the overall sample, this finding was expected, because the selected company operates in a business environment that is characterised by external organisational factors, such as restructuring, mergers and downsizings that may increase the burnout levels of employees. As stated before, previous studies provide clear evidence of the link between burnout and external organisational factors, such as retrenchments, mergers and downsizings (e.g. Jennings, 2008: 6). Retrenchments, mergers and downsizings may trigger layoffs that may result in higher job demands and lower job resources and ultimately lead to

higher levels of burnout (e.g. Maslach *et al.*, 2001: 407-409; Maslach & Goldberg, 1998: 65). Although the respondents in the high burnout tertile only represent 33% of the overall sample, the finding is important, because even modest improvements in the burnout levels of respondents may lead to significant gains for the selected company.

Although the primary objective of the present study is to evaluate the relationship between burnout and turnover intention, associations of burnout with demographic variables, importance of life aspects and important stakeholder relationships were also included in the analysis to enhance the discussion of the predictor variable. As discussed in the literature review chapter, many studies found evidence that burnout is related to some facets of demographic variables, importance of life aspects and important stakeholder relationships. The findings in chapter 4 revealed a number of noteworthy correlations between the burnout dimensions and the variables in question that will be discussed in the paragraphs below. Nine demographic variables were included in the survey; namely gender (V1), age (V2), marital status (V3), number of children (V4), education level (V5), job tenure (V10), employee type (V11), department (V12) and factory/non-factory workers (V35).

The gender (V1) of the respondents does not display statistically significant correlations with exhaustion/cynicism or professional efficacy. Discrepancies between group means are likely due to chance and not related to significant differences between the cohorts. This finding is not surprising, because previous studies on the relationship between burnout and gender have produced mixed and inconclusive results (e.g. Maslach & Jackson, 1985: 847-848; Maslach *et al.*, 2001: 410). Some of the studies revealed high burnout for males and some high burnout for females while others revealed no significant differences between the groups. Although the present sample is predominantly female, this finding suggests that the development of burnout at the selected company is not associated with the gender of the respondents.

The age (V2) of the respondents does not display statistically significant relationships with exhaustion/cynicism or professional efficacy. This finding supports the conclusion reached by Heyns *et al.* (2003: 84) that age does not affect the burnout levels of employees. The finding, however, contradicts the work of Maslach *et al.* (2001: 409-410) that demonstrated higher burnout levels for younger employees compared to those that are older than 30 years. Although the present sample is characterised by

younger and older cohorts, this finding suggests that the development of burnout at the selected company is not associated with the age of the respondents.

The marital status (V3) of the respondents does not display statistically significant correlations with exhaustion/cynicism or professional efficacy. This finding contradicts the work of Maslach *et al.* (2001: 410) which confirmed the relationship between burnout and marital status. The study found that married individuals are less likely to experience burnout compared to those that are unmarried. Furthermore, the results demonstrated that respondents that are identified as single, experience higher levels of burnout than those that are divorced. Although the present sample is characterised by different marital cohorts, this finding suggests that the development of burnout at the selected company is not associated with the marital status of the respondents.

The number of children (V4) of the respondents does not display statistically significant relationships with exhaustion/cynicism or professional efficacy. This finding contradicts the work of Maslach and Jackson (1985: 849) which confirmed the link between burnout and the number of children that respondents have. The study found no evidence to support the notion that increased family responsibilities lead to higher levels of burnout. Instead, the researchers found that employees with children experience lower levels of burnout compared to those without children. Ndetei *et al.* (2008: 202), however, found that emotional exhaustion is significantly associated with the number of children that employees have. The researchers suggest that higher levels of emotional exhaustion may be triggered by higher emotional and financial responsibilities of employees with more children. Although the present sample is characterised by different parental cohorts, this finding suggests that the development of burnout at the selected company is not associated with the number of children that respondents have.

The education level (V5) of the respondents does not display statistically significant correlations with exhaustion/cynicism or professional efficacy. This finding supports the conclusion reached by Heyns *et al.* (2003: 84) that the level of training does not affect the burnout levels of employees. The finding, however, contradicts the work of Maslach *et al.* (2001: 410) which demonstrated higher burnout for employees with higher educational qualifications compared to those with lower levels of education. This finding must be interpreted with caution, because high expectations or confounding variables such as occupation and job status may have an interaction effect on education. Although the present sample is characterised by different

educational cohorts, this finding suggests that the development of burnout at the selected company is not associated with the education level of the respondents.

The job tenure (V10) of the respondents does not display statistically significant relationships with exhaustion/cynicism or professional efficacy. This finding contradicts the suggestion proposed by Maslach *et al.* (2001: 409-410) that employees with shorter job tenure are more likely to experience burnout compared to those with longer job tenure. The researchers speculate that younger employees have limited experience to cope with the initial job stressors and may therefore be more prone to burnout than older employees. Due to the confounding influence of age on work experience, it can be concluded that burnout is more likely early in the career path of employees. On the other hand, Ndetei *et al.* (2008: 202) found that emotional exhaustion is significantly positively related to a greater number of years worked by an employee. Conclusions regarding job tenure should be interpreted with caution, because research on the relationship between burnout and job tenure has been very limited to date. Although the majority of the employees are employed for ten years or longer, this finding suggests that the development of burnout at the selected company is not associated with the job tenure of the respondents.

The employee type (V11) of the respondents does not display statistically significant correlations with exhaustion/cynicism or professional efficacy. Discrepancies between group means are likely due to chance and not related to significant differences between the cohorts. It is not possible to compare this finding with previous literature, because studies on the association of burnout with permanent and temporary employees are almost non-existent. The researcher speculates that both cohorts perceive the work environment at the selected company as satisfying and they can therefore be viewed as a homogenous group that has an identical response to burnout. Temporary workers view themselves as permanent employees with long-term contracts and most of them have remained with the selected company for extended periods. Although the present sample comprises predominantly of permanent employees, this finding suggests that the development of burnout at the selected company is not associated with the employment type of the respondents.

The department category (V12) of the respondents does not display statistically significant correlations with exhaustion/cynicism or professional efficacy. This finding contradicts the work of Gaines and Jermier (1983: 580) who confirmed the link between emotional exhaustion and the departmental variable. The study found that employees in the investigations department experience lower levels of emotional

exhaustion compared to those in the service department of the police organisation. This finding must be interpreted with caution, because confounding variables such as job status and nature of work may have an interaction effect on department. Additionally, Cordes and Dougherty (1993: 632) propose that the confounding influence of speciality area on interpersonal interaction may explain the difference in emotional exhaustion across departments. Police officers have more frequent and violent interactions with criminals and are therefore more likely to experience burnout compared to support personnel evaluating evidence in a laboratory. Although the present sample is characterised by different departmental cohorts, this finding suggests that the development of burnout at the selected company is not associated with the department of the respondents.

The factory and non-factory groups (V35) in the selected company display a statistically significant correlation with exhaustion/cynicism, but not with professional efficacy. According to the results, factory workers display significantly higher mean scores on the exhaustion/cynicism subscale compared to those performing non-factory activities. The factory and non-factory cohorts can be viewed as two overarching departments that differentiate between production and non-production functions in the selected company. This finding supports the work of Gaines and Jermier (1983: 580) which demonstrated higher levels of emotional exhaustion for employees in the service department of the police organisation compared to those in the investigations department. As cautioned before, variables such as job status, nature of work and speciality area on interpersonal interaction may have a confounding effect on the departmental variable. Similarly, these variables may have an interaction effect on the factory and non-factory cohorts in the present study. The researcher speculates that non-factory workers at the selected company enjoy higher job status while performing more enriched work and therefore are less likely to experience burnout compared to those working in the factory. Additionally, factory workers operate in a controlled production environment that involves frequent intense interactions with supervisors and, therefore, are more likely to experience burnout than non-factory employees. This finding is important, because it suggests that the development of burnout at the selected company is associated with the type of work an employee performs.

Several of the demographic variables discussed above displayed no relationships with burnout, even though previous studies had found evidence that these variables are correlated. One plausible explanation for this surprising outcome is hardiness, due to high levels of unemployment and poverty in South Africa. Even though one

third of the present sample reported high levels of burnout, hardiness may encourage employees at the selected company to develop mechanisms to cope with burnout and thus display satisfaction with working conditions. Ndetei *et al.* (2008: 202) made similar suggestions regarding a Kenyan sample that experienced burnout, but nonetheless reported high job satisfaction, job accomplishment and low interference with family life. Furthermore, the researcher speculates that the linguistic and interpretational limitations of the self-administered MBI may lead to methodological errors that may distort the burnout levels reported by employees at the selected company. Alternatively, this surprising outcome may be unique to employees in the electronics manufacturing industry of South Africa.

The importance of family (V6), friends (V7), religion (V8) and work (V9) do not display statistically significant relationships with exhaustion/cynicism or professional efficacy. This finding contradicts the conclusion reached by Cordes and Dougherty (1993: 639-640) that burnout experienced by employees may result in detrimental outcomes for stakeholders such as family and friends. Similarly, Lin *et al.* (2013: 465) suggest that burnout may be reduced by developing improved relationships with family and friends. On the other hand, Ndetei *et al.* (2008: 202) demonstrated that employees experiencing high burnout report low levels of family interference from work. The researchers speculate that this unexpected outcome is related to hardiness as a result of challenging economic and employment conditions in Kenya. The absence of a relationship between burnout and importance of life aspects in the present sample is surprising, because the respondents are clearly influenced by both variables. The present sample displays moderate to high levels of burnout and most of the respondents view family, friends, religion and work as very important or rather important aspects of life. Although the present sample is characterised by high levels of importance of life aspects, this finding suggests that the development of burnout at the selected company is not associated with the importance of family, friends, religion or work. As noted before, hardiness may be a possible explanation for this unexpected finding in the present sample.

Satisfaction with supervisor relationships (V14) displays a weak negative statistically significant correlation with exhaustion/cynicism and a weak positive statistically significant correlation with professional efficacy. According to the results, higher levels of exhaustion/cynicism is associated with less satisfactory relationships with supervisors while higher levels of professional efficacy is associated with more satisfactory relationships with supervisors. As noted before, high scores on the exhaustion/cynicism subscale, together with low scores on the professional efficacy

subscale, reflect high levels of burnout and therefore low satisfaction with supervisor relationships. This finding supports the work of Maslach *et al.* (2001: 407) that confirmed the link between burnout and a lack of social support. The study concluded that a lack of supervisor support may have more serious outcomes for burnout in an organisation compared to a lack of co-worker support. Furthermore, Jackson *et al.* (1987: 347) found evidence that personal accomplishment is associated with supervisor support. This finding may be of importance to the selected company where subordinates and supervisors interact on a daily basis in a controlled factory environment.

As noted before, retrenchments and downsizings at the selected company may lead to layoffs that may contribute to lower levels of social support and ultimately higher levels of burnout. Some researchers suggest that fair and supportive supervisors may contribute to lower burnout risk for employees and higher acceptance of major organisational change such as retrenchments and mergers (e.g. Leiter & Harvie, 1997: 6-7; 1998: 6, 19). The association between burnout, supervisor support and major organisational change may be related to the influence that supervisors have over the workload, resources and organisational support of subordinates. Previous studies confirmed the link between organisational downsizing and social relationships such as co-worker and supervisor support (e.g. Kivimaki *et al.*, 2000: 971; Shah, 2000: 101, 104). According to Shah (2000: 110), advice ties with supervisors can be recreated six months after a downsizing compared to friendship networks that require a longer period to regenerate.

Satisfaction with subordinate relationships (V15) displays a weak negative statistically significant correlation with exhaustion/cynicism, but no association with professional efficacy. According to the results, higher levels of exhaustion/cynicism are associated with less satisfactory relationships with subordinates. This finding supports the work of Lee and Ashforth (1993b: 14) which confirmed the association between emotional exhaustion and subordinate relationships. Furthermore, Jackson *et al.* (1987: 347) concluded that burnout experienced by subordinates may contribute to the burnout of supervisors. This finding may be of importance to the selected company where supervisors and subordinates interact on a daily basis in a controlled factory environment. Satisfaction with co-worker relationships (V13) does not display statistically significant relationships with exhaustion/cynicism or professional efficacy. This finding contradicts the conclusion reached by Lin *et al.* (2013: 465) that burnout levels of employees may be reduced by developing improved relationships with co-workers. The researcher proposes two reasons for the absence of a relationship

between burnout and co-worker relationships in the present study. Firstly, employees that remain with the organisation may experience higher levels of satisfaction with promotional opportunities after dismissal of co-workers due to downsizing (Shah, 2000: 101, 104) and secondly, previous research has demonstrated that a lack of co-worker support has less serious consequences for burnout than a lack of supervisor support (e.g. Maslach *et al.*, 2001: 407).

The present sample displays moderate to high levels of burnout and most of the respondents are satisfied or very satisfied with supervisor, subordinate and co-worker relationships. Although the present sample is characterised by high levels of satisfaction with stakeholder relationships, the results suggest that the development of burnout at the selected company is associated with supervisor and subordinate relationships, but not with co-worker relationships. These findings must be interpreted with caution, because more than twenty percent of the present sample reported satisfaction with stakeholder relationships as neutral. The researcher speculates that the respondents hesitated to respond to questions regarding supervisors, subordinates and co-workers due to sensitivities or suspicions about the survey. As discussed in chapter three, supervisors were directly involved in the distribution and collection of questionnaires and may have increased suspicions regarding the survey.

5.2.2 What is the level of turnover intention amongst employees at the selected company?

The present sample displays a moderate mean score of 2.54 (SD = 1.14) on the turnover intention scale that may be classified as moderate turnover intention according to the cut-off points in chapter four. This finding demonstrates that the level of turnover intention experienced by employees at the selected company is average and within reasonable limits. This finding, however, is somewhat surprising, because the selected company has a history of mergers and acquisitions that may contribute to turnover intention of employees. Previous studies have found evidence that turnover intention is associated with major organisational changes, such as mergers and acquisitions (e.g. Armstrong-Stassen *et al.*, 2001: 158). The researchers concluded that the turnover intention of employees increased during the merging phase compared to the pre-merging period. As noted before, hardiness may be a plausible explanation for this unexpected finding in the present sample. Furthermore, the overall sample displays moderate mean scores for the three individual items of the turnover intention scale; namely V32 (M = 2.66, D = 1.32), V33 (M = 2.20, D = 1.25) and V34 (M = 2.75, D = 1.46). The researcher speculates that item V33 ("How frequently do you actively look for jobs outside the company?") has the lowest mean

score, because employees at the selected company are fearful that those searching for external jobs may be prioritised for layoffs.

Although the overall sample revealed moderate turnover intention levels, respondents in the upper tertile of the exhaustion/cynicism subscale displayed a high mean score of 3.39 (SD = 1.07) on the turnover intention scale that may be classified as high turnover intention. This finding demonstrates that the level of turnover intention experienced by respondents in the upper tertile of the exhaustion/cynicism subscale is high and outside reasonable limits. Unlike the results for the overall sample, this finding is not surprising, because the selected company has a history of mergers and acquisitions that may increase the turnover intention of employees. As stated before, previous studies found evidence that turnover intention is associated with major organisational changes, such as mergers and acquisitions (e.g. Armstrong-Stassen *et al.*, 2001: 158). Furthermore, the respondents in the upper exhaustion/cynicism tertile have a high mean burnout score that may lead to increased levels of turnover intention at the selected company. As discussed in the literature review, previous studies confirmed the link between burnout and turnover intention. The relationship between burnout and turnover intention will be discussed in more detail in the sections below. Although the respondents in the high burnout tertile only represent 33% of the overall sample, the finding is important, because even modest improvements in the turnover intention levels of respondents may lead to significant gains for the selected company.

5.2.3   Is there a difference in the turnover intention of employees with high burnout as opposed to those with low burnout?

As discussed before, low scores of exhaustion/cynicism combined with high scores of professional efficacy reflect low levels of burnout, while moderate scores of exhaustion/cynicism combined with moderate scores of professional efficacy reflect moderate levels of burnout and high scores of exhaustion/cynicism combined with low scores of professional efficacy reflect high levels of burnout (Maslach *et al.*, 1996: 5). In order to answer the research question, it is necessary to identify cohorts in the present sample that display low and high burnout levels and to compare these groupings in terms of turnover intention. As discussed in chapter four, the combined sample displays moderate mean scores for exhaustion/cynicism (M = 2.15, SD = 1.49) and professional efficacy (M = 4.84, SD = 1.16) that is classified as moderate burnout. The respondents in the present study experience moderate levels of burnout and turnover intention (M = 2.54, SD = 1.14). The results, however, demonstrated

that the individual exhaustion/cynicism tertiles reflect different levels of burnout and turnover intention for some of the groupings.

The lower tertile of the exhaustion/cynicism subscale displays a low mean score for exhaustion/cynicism (M = 0.56, SD = 0.29) and a moderate mean score for professional efficacy (M = 4.93, SD = 1.17) that is classified as low to moderate burnout. This tertile represents low to moderate burnout, because the respondents in the grouping display moderate rather than high levels of professional efficacy. The respondents in this cohort experience low to moderate levels of burnout and low levels of turnover intention (M = 1.91, SD = 0.94). The middle tertile of the exhaustion/cynicism subscale displays a moderate mean score for exhaustion/cynicism (M = 1.96, SD = 0.43) and professional efficacy (M = 4.85, SD = 1.16) that is classified as moderate burnout. According to the results, the respondents in this grouping experience moderate levels of burnout and turnover intention (M = 2.33, SD = 0.87). The upper tertile of the exhaustion/cynicism subscale displays a high mean score for exhaustion/cynicism (M = 3.92, SD = 0.85) and a low mean score for professional efficacy (M = 4.75, SD = 1.16) that is classified as high burnout. According to the results, the respondents in this cohort experience high levels of burnout and turnover intention (M = 3.39, SD = 1.07). The findings in this section suggest that there is a difference in the turnover intention of employees with high burnout as opposed to those with low burnout.

5.2.4 If there is a difference in the turnover intention of employees with high burnout as opposed to those with low burnout, what is the nature of this difference?

As discussed in the previous section, there is a difference in the turnover intention of employees with high burnout compared to those with low burnout. Respondents in the lower tertile of the exhaustion/cynicism subscale experience low levels of burnout and turnover intention while those in the upper tertile experience high levels of burnout and turnover intention. The nature of the difference in the mean scores of turnover intention across different categories of the exhaustion/cynicism and professional efficacy subscales was analysed in chapter four by means of one-way ANOVA and post hoc Bonferroni tests.

According to the results, the analysis of variance indicated that there are statistically significant differences in the mean scores of turnover intention for the different exhaustion/cynicism categories (F = 25.360, p < 0.001), but not for the professional efficacy categories (F = 0.139, p = 0.871). The post hoc Bonferroni tests revealed that these statistically significant differences in the mean scores of turnover intention are

present between the high and low (Mean Diff. = 1.48110, p < 0.001) as well as the high and moderate (Mean Diff. = 1.05833, p < 0.001) tertiles of the exhaustion/cynicism subscale. According to the results, respondents in the upper exhaustion/cynicism tertile experience significantly higher levels of turnover intention (M = 3.39, SD = 1.07) compared to those in the middle (M = 2.33, SD = 0.87) and lower tertiles (M = 1.91, SD = 0.94). The mean scores of turnover intention, however, are not significantly different for the lower and middle exhaustion/cynicism tertiles.

5.2.5 Is there a relationship between burnout and turnover intention at the selected company?

As discussed in the previous sections, the overall sample in the present study displays moderate levels of burnout and turnover intention. Further analysis, however, revealed that the respondents in the individual exhaustion/cynicism groupings display different levels of turnover intention. The results demonstrated that there is a difference in turnover intention of respondents with high burnout compared to those with low burnout. According to the results, respondents in the upper exhaustion/cynicism tertile experience significantly higher levels of turnover intention compared to those in the middle and lower tertiles. This section will answer the final research question that deals with the relationship between burnout and turnover intention at the selected company. The relationship between the burnout dimensions and turnover intention was analysed in chapter four by means of Spearman's rank-order correlation tests and a number of noteworthy findings were revealed.

According to the results, the Spearman's rank correlation coefficients display a moderate positive statistically significant relationship between exhaustion/cynicism and turnover intention (p < 0.001, r_s = 0.542). The results suggest that respondents with higher scores on the exhaustion/cynicism subscale experience higher levels of turnover intention. Due to methodological limitations, the present study can determine if a correlation exists between burnout and turnover intention, but cannot establish the direction of causality. The results in the present study thus demonstrate a relationship between the exhaustion/cynicism dimension of burnout and turnover intention, but cannot determine whether exhaustion/cynicism causes turnover intention. On the other hand, professional efficacy displays no statistically significant or practically relevant relationships with turnover intention or any of its individual items.

Although most previous studies have confirmed the three-dimensional association between burnout and turnover intention (e.g. Chan *et al.*, 2015: 360, 365), the present study has found that exhaustion/cynicism is the only burnout dimension that is related

to turnover intention. As discussed in the literature review, this one-dimensional association between burnout and turnover intention is supported by previous research (e.g. Cropanzano *et al.*, 2003: 166; Leiter & Maslach, 2009: 337) and is therefore not unique to the present study. The finding mentioned in the previous paragraph, however, contradicts the work of Rothmann and Joubert (2007: 58) who concluded that exhaustion and cynicism are negatively related to turnover intention in a South African context. The importance of exhaustion/cynicism in the present study is confirmed by previous research that identifies exhaustion as the core component of burnout (e.g. Schaufeli & Van Dierendonck, 1993: 643) while rejecting professional efficacy as a separate dimension of the construct (e.g. Demerouti *et al.*, 2001: 500).

Furthermore, the Spearman's rank correlation tests reveal weak to moderate positive statistically significant relationships between exhaustion/cynicism and turnover cognitions V32 ($p < 0.001$, $r_s = 0.566$), job search activity V33 ($p < 0.001$, $r_s = 0.340$) and likelihood of leaving the job V34 ($p < 0.001$, $r_s = 0.452$). The results suggest that respondents with higher scores on the exhaustion/cynicism subscale experience higher levels of turnover cognitions, job search activity and likelihood of leaving the job. This finding supports previous research which found that burnout is associated with thoughts about leaving the job (e.g. Jackson *et al.*, 1986: 637; Kaatz *et al.*, 1999: 169-170), while it contradicts research which found that burnout is not associated with job search activity or turnover intention (e.g. Jackson *et al.*, 1986: 637).

This researcher proposes three plausible reasons why the relationship between the burnout dimensions and turnover intention in the present study is not surprising. Firstly, major organisational changes such as mergers, acquisitions and retrenchments may influence burnout (e.g. Jennings, 2008: 6) as well as turnover intention (e.g. Armstrong-Stassen *et al.*, 2001: 158). As noted before, the selected company has a history of acquisitions and mergers which may contribute to burnout and turnover intention of employees. Secondly, chapter four cautions that all three turnover intention items must be present to ensure that the reliability of the instrument is acceptable. It is therefore expected that turnover cognitions, job search activity and likelihood of leaving the job are individually representative of the overall construct and will therefore display similar associations with exhaustion/cynicism. It is speculated that job search activity has the lowest mean score ($M = 2.20$, $D = 1.25$), because respondents fear that those searching for jobs may be prioritised for layoffs. Thirdly, hardiness (Ndetei *et al.*, 2008: 202) due to high levels of unemployment and poverty in South Africa may be a plausible explanation for the absence of a relationship between professional efficacy and turnover intention in the present study. These

unfavourable economic conditions may encourage employees with high levels of exhaustion/cynicism to develop coping mechanisms and to display job satisfaction. Respondents may view themselves as fortunate to be employed and therefore inflate their professional efficacy scores in an effort to ensure employment continuity.

The relationship between exhaustion/cynicism and turnover intention amongst employees at the selected company may be influenced by two of the findings that were discussed in the previous chapter. Firstly, factory workers at the selected company experience significantly higher levels of exhaustion/cynicism compared to non-factory workers. The factory workers account for almost two thirds of the workforce and may therefore contribute significantly to burnout and, ultimately, turnover intention at the selected company. It is in the interest of the selected company to prioritise wellness programmes and interventions for factory workers. Secondly, based on the results in chapter four, exhaustion/cynicism is negatively associated with subordinate and supervisor relationships, while professional efficacy is positively associated with supervisor relationships. As noted before, the selected company has a history of acquisitions and mergers which may lead to downsizings and layoffs. These major organisational changes may contribute to higher job demands and lower job resources that may directly influence subordinate and supervisor roles at the selected company. It is therefore plausible that major organisational changes at the selected company may have negative consequences for subordinate and supervisor relationships and, as a result contribute to exhaustion/cynicism, professional efficacy and, ultimately, turnover intention. The selected company may introduce change management training during major organisational changes to improve stakeholder relationships.

The research hypothesis proposes that a positive relationship exists between burnout and turnover intention amongst employees at the selected company. Based on the results in chapter four, only exhaustion/cynicism is positively related to turnover intention. This suggests that employees with higher levels of exhaustion/cynicism have greater intention to leave the selected company compared to those with lower levels of exhaustion/cynicism. The hypothesis in the present study is only partially supported, because the association with turnover intention is based on a single burnout dimension, rather than all three.

5.3   Contributions of the research

5.3.1   Academic contributions

The present study makes several noteworthy contributions to burnout research in the electronics manufacturing industry. These contributions are summarised below and relate to factors such as job function, stakeholder relationships and associations between the burnout dimensions and turnover intention.

1. The present research contributes to the number of studies conducted in South Africa that employs arbitrary cut-off points for burnout and turnover intention that are derived by dividing the subscale scores into equal tertiles.

2. Employees that perform manufacturing job functions experience significantly higher levels of exhaustion/cynicism compared to those that perform other functions.

3. Exhaustion/cynicism is significantly related to satisfaction with subordinate relationships.

4. Exhaustion/cynicism is significantly related to satisfaction with supervisor relationships.

5. Professional efficacy is significantly related to satisfaction with supervisor relationships.

6. High burnout employees experience significantly higher levels of turnover intention compared to those with lower burnout.

7. The levels of exhaustion/cynicism that employees experience are significantly associated with turnover cognitions, job search activity, likelihood of leaving the job and turnover intention.

As shown before, most of these contributions relate to factors that are influenced by organisational policies and procedures that are under the control of management. This provides opportunities for organisations to reduce burnout and turnover intention by introducing interventions such as training and wellness programmes for managers.

5.3.2   Contributions for electronics manufacturing companies

The present study makes a number of significant contributions that provide electronics manufacturing companies with opportunities to reduce burnout and turnover intention. As noted before, management has direct control over some factors that influence these variables and management is therefore instrumental in the intervention process. Employees experience lower burnout and higher acceptance of

major organisational change when management is perceived to be fair and supportive (Leiter & Harvie, 1997: 6-7, 1998: 6, 19). This is especially important during major organisational changes when managers must ensure that employees have fair access to resources and social support. Electronics manufacturing companies that experience major organisational changes may benefit from change management training that is targeted at the managers in the organisation.

As shown, the job function variable is an indicator of the level of exhaustion/cynicism experienced by employees in electronics manufacturing companies. Employees that perform functions that are directly related to manufacturing, experience significantly higher levels of exhaustion/cynicism compared to those performing other functions. This finding may be as a result of intense interaction between subordinates and supervisors on a daily basis at the selected company. It is in the interest of electronics manufacturing companies to prioritise interventions such as health and wellness programmes for factory employees. Furthermore, the introduction of team building activities for factory employees may improve stakeholder relationships.

Satisfaction with stakeholder relationships may influence the levels of exhaustion/cynicism and professional efficacy of electronics manufacturing employees. The levels of exhaustion/cynicism experienced by employees will increase as satisfaction with subordinate or supervisor relationships deteriorate. On the other hand, the levels of professional efficacy experienced by employees will decrease as satisfaction with supervisor relationships deteriorate. These findings may be as a result of major organisational changes that influence the intense interrelationships between subordinates and supervisors at the selected company. Electronics manufacturing companies that wish to mitigate the negative implications of burnout should provide employees with the necessary social support and resources to deal with major organisational changes and intense stakeholder relationships.

As shown in this study, high burnout employees experience significantly higher levels of turnover intention compared to those with lower burnout. The levels of exhaustion/cynicism reported by electronics manufacturing employees are positively related to turnover cognitions, job search activity, likelihood of leaving the job and turnover intention. This implies that employees with higher levels of exhaustion/cynicism experience higher levels of turnover cognitions, job search activity, likelihood of leaving the job and turnover intention. As discussed before,

these findings may be related to major organisational changes at the selected company that can influence both burnout and turnover intention.

In order to reduce the detrimental outcomes of burnout and turnover intention, it is important for electronics manufacturing companies to provide employees with the necessary social support and resources to overcome these challenges (Lin *et al.*, 2013: 465; Montgomery *et al.*, 2005: 270). Furthermore, management should encourage employees to operate in teams that are administered by team leaders (Blankertz & Robinson, 1997: 528). This is especially important for factory employees where high levels of exhaustion/cynicism are more likely. Implementation of the remedies proposed in this section by electronics manufacturing companies will contribute to lower levels of burnout and turnover intention which may ultimately lead to improved productivity and profitability for the organisation.

5.4 Conclusions of the research

The present research has shown how turnover intention is associated with the development of burnout in electronics manufacturing companies. Electronics manufacturing employees with high burnout display significantly higher levels of turnover intention compared to those with lower burnout. The research, however, has shown that exhaustion/cynicism is the only burnout dimension associated with turnover cognitions, job search activity, likelihood of leaving the job and turnover intention. As shown through the present research, a number of factors were identified that may influence the burnout dimensions and ultimately lead to turnover intention. The present research has shown that the development of burnout amongst electronics manufacturing employees is conceptualised by two dimensions namely exhaustion/cynicism and professional efficacy. Exhaustion/cynicism appears to be the more dominant dimension of burnout and displays a number of significant associations with demographic variables, stakeholder relationships and turnover intention.

As shown through the present research, the job function of electronics manufacturing employees is an indicator for the development of burnout. Employees performing functions directly related to manufacturing experience significantly higher levels of exhaustion/cynicism compared to those performing other functions. Furthermore, satisfaction with stakeholder relationships may have positive or negative consequences for the development of burnout in electronics manufacturing companies. Employees that are less satisfied with subordinate or supervisor relationships display higher levels of exhaustion/cynicism, whereas those that are

more satisfied with subordinate or supervisor relationships display lower levels of exhaustion/cynicism. Unlike exhaustion/cynicism, professional efficacy revealed a significant association only with supervisor relationships. Employees that are less satisfied with supervisor relationships display lower levels of professional efficacy, whereas those that are more satisfied with supervisor relationships display higher levels of professional efficacy.

The present research provides opportunities for managers of electronics manufacturing companies to intervene and reduce burnout by introducing interventions that focus on the job functions of employees and stakeholder relationships. Managers in electronics manufacturing companies have some control over the variables that affect the development of burnout amongst employees. This provides a further opportunity for electronics manufacturing companies to mitigate the negative outcomes of burnout by introducing interventions that focus on management training. As shown through the present research, major organisational changes may contribute to the levels of burnout experienced by electronics manufacturing employees. With rapid globalisation and technological innovation becoming the norm, more electronics manufacturing companies will experience major organisational changes such as acquisitions, mergers, downsizings and retrenchments. This trend will contribute to higher levels of burnout and ultimately turnover intention for electronics manufacturing employees. It is therefore in the interest of electronics manufacturing companies to introduce burnout interventions such as work teams, team building, mentoring, change management training and wellness programmes to ensure that employees have the necessary resources to cope with the job demands, especially in times of major organisational change.

5.5   Limitations and recommendations for further research
5.5.1   Limitations of the present study

This study investigated the relationship between burnout and turnover intention at a selected electronics manufacturing company in Cape Town, South Africa. The research focused primarily on the existence of a relationship between the dependent and independent variables, but did not consider the direction of causality between the variables. As a result, the present study determined whether the variables are correlated, but cannot establish whether burnout causes turnover intention. In order to determine whether burnout predicts turnover intention, future research must be based on controlled studies. The selected company is part of an international organisation with electronics manufacturing plants in various countries across the globe. Due to financial and time constraints it is not practical or feasible to expand the

present study to include all electronics manufacturing plants that form part of the parent company. Similarly, this study does not consider all the electronics manufacturing companies in Cape Town, South Africa.

The present study used non-probability convenience sampling techniques and, therefore, the survey results are representative of the targeted population, but may not be generalised to other populations. Research findings from this study cannot be generalised to similar companies in the organisation due to potential organisational, geographical and cultural differences. Seeletse (2001: 505) warns that non-probability sampling cannot produce justifiable generalisations unless additional research is conducted. This issue does not concern the current researcher, because the present study is focussed on determining if there is a relationship between burnout and turnover intention at the selected company.

Some of the limitations in the present study relate to the research methodology and may affect the reliability of the findings. Response bias may influence the accuracy of results obtained from questionnaires due to low or incomplete responses, sensitivity to dependent or independent variables and confidentiality concerns (Maslach *et al.*, 1996: 5-7). While the potential for response bias is present in most studies, the researcher has attempted several approaches to overcome these challenges in the present study. The sample comprised of 230 employees from the selected company and the response rate was fifty eight percent. A further limitation in the present study is the dependence on a quantitative methodology and the lack of qualitative interviews with participants. Qualitative interviews capture the perspectives of the respondents and produce subjective and contextualised results which can be compared against the quantitative responses of participants.

Maslach *et al.* (1996: 7) propose that the MBI-GS should be administered by an examiner to minimise response bias, but caution that such individuals should not be direct supervisors of the respondents. In order to minimise the impact of the study on the production plant, no special examiners were trained or used, however supervisors assisted with the distribution and collection of questionnaires. With more than twenty percent of the present sample reporting satisfaction with stakeholder relationships as neutral, it is speculated that direct participation of supervisors in the survey process contributed to suspicions about the study and response bias amongst participants. The involvement of supervisors was not ideal, but was encouraged by management in order to minimise disruption to the production plant. Furthermore, the linguistic and interpretational limitations of the self-administered MBI increased the risk of

methodological errors that may distort the burnout scores reported by employees at the selected company.

According to Schaufeli (2003: 5), most burnout research focuses exclusively on healthy employees and ignores those that are absent. Similarly, the present study includes only healthy employees and excludes those that are ill, have relocated or were retrenched. This "healthy worker" approach may distort the results, because it excludes an important cohort of the sample that may suffer from extreme burnout. A further limitation in the present study is the exclusion of ethnicity as a demographic variable of burnout due to concerns that ethnic classifications may offend racial sensitivities. South Africa has only recently emerged from apartheid, a government sponsored system that discriminated against citizens based on race. The researcher has speculated that ethnic classifications in the survey may offend racial sensitivities amongst employees and ultimately lead to fewer responses from participants. As a result, the research findings may be skewed toward some ethnic groups that are more willing to respond to the survey question.

5.5.2   Recommendations for further research

As discussed in the literature review, many researchers found evidence that burnout is related to turnover intention, however only a few studies confirmed this relationship for electronics manufacturing companies in the South African context. The present study has found that exhaustion/cynicism is the only burnout dimension that is related to turnover intention. In order to make further contributions to the study of burnout in South Africa, the following areas of research are recommended for future studies:

As noted before, the present study used non-probability sampling and research findings can therefore not be generalised to other populations. Generalising the conclusions of the research to other populations falls beyond the scope of the present study and offer opportunities for future research. The present study used a cross-sectional quantitative research design to evaluate the relationship between burnout and turnover intention. Future studies should include longitudinal qualitative techniques in order to obtain more subjective and contextualised data that can demonstrate the correlation patterns of variables over time. Furthermore, the present study was based on the "healthy worker" effect where the survey was distributed only to healthy workers and not to those that were ill, relocated or retrenched. These individuals were excluded from the survey as a result of the limited scope and feasibility of the study. In order to gain an accurate reflection of the level of burnout in

electronics manufacturing companies, it is important to expand future studies to include absent, ill, relocated and retrenched employees.

Notwithstanding the remedies discussed in this chapter to reduce response bias, some opportunities exist for increasing response rates in future studies. As mentioned before, the present study used pen-and-paper questionnaires due to limited access to the internet for respondents. Although pen-and-paper questionnaires have several benefits, electronic surveys produce less missing responses (Boyer *et al*., 2002: 370-371) and therefore contribute to lower response bias. Future studies should investigate the possibility of using electronic questionnaires and providing respondents with internet access during the survey. In order to minimise disruptions to the production plant, the MBI-GS burnout instrument was self-administered and respondents did not have assistance from trained examiners. Additionally, some of the direct supervisors of the respondents were involved in the distribution and collection of questionnaires. Future studies should use trained examiners to administer the survey and ensure that management is excluded from the process to encourage more employees to participate in the research.

According to Maslach *et al.* (2001: 410), very few studies have been conducted on ethnicity as an antecedent of burnout and further research is needed to investigate the relationship between these variables. Future studies on ethnicity as a demographic variable of burnout may be beneficial for electronics manufacturing companies operating in the multi ethnic South African business environment. As discussed before, major organisational changes, hardiness, supervisory relationships and subordinate relationships are of interest in the present study due to the potential interacting effects on the relationship between burnout and turnover intention. It is in the interest of electronics manufacturing companies in South Africa to investigate the associations of these variables with burnout and turnover intention. Findings from these studies may provide explanations for the unexpected results in the present study regarding the potential effects of hardiness on burnout.

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APPENDICES

APPENDIX A: LETTER OF CONSENT TO CONDUCT RESEARCH

27 March 2009

Mr G Marshall
24 Oceana Ruby Way
Hout Bay
7806

Dear George

REQUEST TO CONDUCT RESEARCH

Your request to conduct research with our organization has been approved.

I would however, request that you set up a meeting with me to discuss the communication and roll out of this questionnaire prior to you sending these out.

The rules of the Company in respect of confidentiality and use of data are to be strictly adhered to.

Yours faithfully

SUE BERRINGTON

APPENDIX B: COVER LETTER FOR PARTICIPANTS

Cape Peninsula
University of Technology

Graduate Centre for Management
Faculty of Business
Cape Town Campus
021 460 3911

19 May 2009

Dear Respondent

I, George Marshall, am conducting research into employee perception and attitudes toward work duties in the electronics manufacturing industry of South Africa. The study forms part of a master's thesis in Business Administration at the Cape Peninsula University of Technology. Senior management at your company as well as your union representatives support the study. Your participation in the study will be appreciated and will make a huge contribution to its success.

Your participation in this survey is completely voluntary. Findings from the study may provide valuable input to improve the work environment at your company and may contribute to implementation of future corporate wellness programmes. I would therefore kindly request that you complete the following short questionnaire regarding your attitudes and behaviours toward work duties at your company. It should take no longer than 20 minutes to complete the questionnaire.

Participation in the survey is completely confidential. Please do not enter your name or contact details on the questionnaire. This will ensure that your name cannot be linked to your specific responses. Data collected from the survey will only be used for research purposes and will be stored by the researcher in South Africa. Your specific responses will under no circumstances be disclosed to any other source, especially your employer.

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If you are willing to participate in the study, please complete the survey and place the completed questionnaire in the envelope provided. Please seal the envelope and return it to your supervisor or place it into the collection box in your company's canteen. Your supervisor will ensure that the sealed envelope is sent back to the researcher. It would be appreciated if you could return the completed questionnaire by no later than the 29th May 2009. As mentioned earlier, only the research team will have access to your completed questionnaire.

Thank you for your time and effort in participating in this study. Your contribution is greatly appreciated. Should you have any questions, concerns or queries relating to the research, please feel free to contact the researcher, George Marshall, or his research supervisor, Carly Steyn, at the contact details below.

George Marshall (Researcher)
Tel: 021 506 6000 Ext 6088
E-mail: georgemsa@gmail.com

Carly Steyn (Research Supervisor)
Tel: 021 460 9019
E-mail: steync@cput.ac.za

Yours faithfully

George Marshall

WORK RELATED ATTITUDES AND BEHAVIOUR QUESTIONNAIRE

The purpose of this questionnaire is to evaluate employee perception and attitudes toward work duties at your company. It is a self-administered structured questionnaire and consists of two sections. The first section covers selected biographical and work related information. The second section measures perceptions and attitudes toward work duties.

Please adhere strictly to all instructions on the questionnaire and answer all questions. There are no right and wrong answers to any of the questions. Please note that employees who are in the process of retrenchment or relocation are not required to complete the questionnaire.

SECTION 1: BIOGRAPHICAL AND WORK-RELATED INFORMATION

Please answer the following questions by placing a cross (**X**) in the appropriate box or writing down your answer in the space provided. Please see below, an **EXAMPLE** of how to complete the questionnaire.

EXAMPLE!!!

What is your gender? (If you are male, select top box)	Please Cross
Male	X
Female	2

V1. What is your gender? (Please cross the appropriate response)

	Please Cross
Male	1
Female	2

V2. What is your age (in years)? _____

3

V3. Are you currently?
(Please cross the appropriate response)

	Please Cross
Married	1
Unmarried, but cohabiting with a partner	2
Divorced	3
Separated	4
Widowed	5
Single	6

V4. How many children do you have? _____

V5. What is your highest educational qualification attained?

	Please Cross
Grade 11 or lower (Std 9 or lower)	1
Grade 12 (Matric, Std 10) or equivalent	2
Post school diploma/certificate	3
National diploma/national higher diploma	4
Bachelors degree or equivalent	5
Honours degree or equivalent	6
Masters degree or equivalent	7
Doctoral degree or equivalent	8

How important or unimportant are the following items in your life? Please indicate your selection by placing a cross (X) in the appropriate box.

	Very important	Rather important	Neither important nor unimportant	Not very important	Not at all important
V6. Family	1	2	3	4	5
V7. Friends	1	2	3	4	5
V8. Religion	1	2	3	4	5
V9. Work	1	2	3	4	5

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V10. How long have you been working for this company? Years: _____; Months: _____

V11. Are you currently a? (Please cross the appropriate response)	Please Cross
Permanent employee	1
Temporary employee	2

V12. In which department are you currently employed?	Please Cross
Administration	1
Production	2
Production Support	3
Supply Chain	4
Stores	5
Quality & Reliability	6
Service	7
Human Resources	8
Information Technology	9
Finance	10
Despatch & Logistics	11
Maintenance	12
Other	13

How satisfied or dissatisfied are you with the following relationships? Please indicate your selection by placing a cross (X) in the appropriate box.

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Not applicable
V13. Relationships with your co-workers	1	2	3	4	5	6
V14. Relationships with your supervisors	1	2	3	4	5	6
V15. Relationships with your subordinates	1	2	3	4	5	6

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SECTION 2: EMPLOYEE PERCEPTION AND REACTION TO WORK

This section evaluates how employees at the company view their jobs and react to their work. It also measures the intention of employees to leave the company. The following list of job related feelings could be associated with work. Please indicate on the scale provided, how often, if at all, you experience each of these feelings by placing a cross (**X**) in the appropriate box.

	Never	A few times a year	Once a month	A few times a month	Once a week	A few times a week	Every day
V16. I feel emotionally drained from my work.	0	1	2	3	4	5	6
V17. I feel used up at the end of the workday.	0	1	2	3	4	5	6
V18. I feel tired when I get up in the morning and have to face another day on the job.	0	1	2	3	4	5	6
V19. Working all day is really a strain for me.	0	1	2	3	4	5	6
V20. I can effectively solve the problems that arise in my work.	0	1	2	3	4	5	6
V21. I feel burned out from my work.	0	1	2	3	4	5	6
V22. I feel I am making an effective contribution to what this organization does.	0	1	2	3	4	5	6
V23. I have become less interested in my work since I started this job.	0	1	2	3	4	5	6
V24. I have become less enthusiastic about my work.	0	1	2	3	4	5	6
V25. In my opinion, I am good at my job.	0	1	2	3	4	5	6
V26. I feel exhilarated (excited) when I accomplish something at work.	0	1	2	3	4	5	6
V27. I have accomplished (achieved) many worthwhile things in this job.	0	1	2	3	4	5	6
V28. I just want to do my job and not be bothered.	0	1	2	3	4	5	6
V29. I do not believe my work contributes anything.	0	1	2	3	4	5	6
V30. I doubt the significance (importance) of my work.	0	1	2	3	4	5	6
V31. At my work, I feel confident that I am effective at getting things done.	0	1	2	3	4	5	6

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On the scale provided, please indicate your selection by placing a cross (X) in the appropriate box.

	Not at all	Rarely	Some-times	Often	A great deal
V32. How frequently have you considered leaving your job in the last twelve months?	1	2	3	4	5
V33. How frequently do you actively look for jobs outside the company?	1	2	3	4	5

On the scale provided, please indicate your selection by placing a cross (X) in the appropriate box.

	Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely
V34. How likely are you to leave your job in the next twelve months?	1	2	3	4	5

Your survey is now complete. Please ensure that all questions are answered. Place the completed questionnaire in the envelope provided and seal it. Return the sealed envelope to your supervisor or place it into the collection box in your company's canteen. Your supervisor will ensure that the sealed envelope is sent back to the researcher. As mentioned earlier, only the research team will have access to your completed questionnaire. Thanks again for participating in this study. Your contribution is greatly appreciated.

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