

**INVESTIGATING THE INFLUENCE OF MANAGER BEHAVIOUR ON THE
TURNOVER INTENTIONS OF EMPLOYEES IN THE MINING INDUSTRY**

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FOR THE READER'S ATTENTION

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- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the *South African Journal of Industrial Psychology* (which agrees largely with the APA style) is used, but the APA guidelines were followed in constructing tables.

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DECLARATION

I, Juná Bothma, hereby declare that “Investigating the influence of manager behaviour on the turnover intentions of employees in the mining industry” is my own original work and that the opinions and views expressed in this work are those of the authors and relevant literature references shown in the references.

Further I declare the content of this research will not be handed in for any other qualification at any other tertiary institution.

JUNÁ BOTHMA

NOVEMBER 2010

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SUMMARY

Title: Investigating the influence of manager behaviour on the turnover intentions of employees in the mining industry

Key words: Manager behaviour, interactional justice, feedback, recognition, job satisfaction, social support, turnover intention, scarce and critical skills

The objective of this study was to investigate the influence of manager behaviour on the turnover intentions of employees with scarce and critical skills in the mining industry. A cross-sectional survey design was used. A purposive sample ($n = 505$) was used to collect the data at a platinum operation. Questionnaires were given to employees with scarce and critical skills who fall within the C1 – D1 Patterson level range.

Cronbach alpha coefficients were used to assess the reliability and validity of the measuring instruments. All the factors relating to manager's behaviour proved reliable, with the exception of feedback, and recommendations were made to improve the reliability of this specific scale. Results indicated statistically significant relationships between job satisfaction, recognition, feedback, communication from the manager and supervisor support, while a lack of job satisfaction, recognition, feedback, communication from the manager and supervisor support could be applied to predict turnover intentions of employees with scarce and critical skills. The moderating effect of supervisor social support between levels of recognition and turnover intention was supported.

Based on the results obtained, conclusions were made after which recommendations were made for future research.

OPSOMMING

Titel: 'n Ondersoek na die invloed van die bestuurder se gedrag op werkers in die mynbedryf se voorneme om te bedank.

Sleutelwoorde: Bestuursgedrag, interaktiewe geregtigheid, terugvoer, erkenning, werkstevredenheid, sosiale ondersteuning, voorneme om te bedank, skaars en kritieke vaardighede

Die algemene doel van hierdie studie was om die invloed van bestuursgedrag op werkers met skaars en kritieke vaardighede, in die mynbedryf, se voorneme om te bedank, te bepaal. 'n Dwarsdeursnee-opname-ontwerp is gebruik. 'n Doelgerigte steekproef is by 'n platinum-aanleg geneem (n = 505). Vraelyste is deur werkers met skaars en kritieke vaardighede, tussen die vlakke C1 en D1 ingevul.

Cronbach alfakoëffisiënte is gebruik om die betroubaarheid en geldigheid van die meetinstrumente te bepaal. Al die faktore wat verband hou met bestuursgedrag is betroubaar gevind, met die uitsondering van Terugvoer, en aanbevelings is gemaak om die betroubaarheid van die Terugvoerskaal te verhoog. Resultate het aangedui dat statisties betekenisvolle verskille voorgekom het tussen werkstevredenheid, erkenning, terugvoer, kommunikasie van die bestuurder en toesighouerondersteuning, terwyl 'n gebrek aan werkstevredenheid, erkenning, terugvoer, kommunikasie van die bestuurder en toesighouerondersteuning aangewend kon word om die werkers met skaars en kritieke vaardighede se voorneme om te bedank, te bepaal. Die modererende effek tussen erkenning en die voorneme om te bedank is ondersteun.

'n Gevolgtrekking waartoe gekom is, is gebaseer op die bevindinge van die resultate. Ter afsluiting is aanbevelings aan die hand gedoen rakende toekomstige navorsing.

CHAPTER 1

INTRODUCTION

This dissertation focuses on the impact of manager behaviour on the turnover intention of employees with scarce and critical skills in the mining industry. Chapter 1 will focus on the problem currently experienced in South Africa regarding retention of employees and will state the need for this research to take place. A literature study will also be conducted to determine the relationships between the different variables of interest to this study, namely recognition, feedback, communication with the manager, social support, job satisfaction and turnover intention. Chapter one will also identify the objectives of this study and indicate how this research will be conducted. Chapter 2 will consist of the research article and Chapter 3 will give conclusions based on the findings, as well as acknowledge limitations and make recommendations.

1.1 PROBLEM STATEMENT

1.1.1 Overview of the problem

Extensive change is the norm for most organisations in the world today and the business world is becoming highly competitive and unpredictable. Businesses are confronted with major technological changes, non-corresponding markets, severe competition from local and international companies, and more demanding customers (Naidu & Van der Walt, 2005). In South Africa, many changes took place after 1994; these changes occurred in the political, economic, social and technological environments (Bainbridge, 1996; Brill & Worth, 1997). All of these changes, and specifically the changes in South African law, caused South African businesses, including the mining industry, to experience enormous pressure. The implication of these changes are that doing what was done yesterday, or doing it a little better, is no longer a guarantee for success. Instead, major changes in business practices, methodologies and leadership competence are necessary to survive and compete effectively in this new environment (Naidu & van der Walt, 2005). Thus the demand for leadership increases, for change demands leadership to ensure that it is managed in an effective way, ultimately leading to the success of the organisation.

"Leadership" and "management" are often seen as similar terms but are in fact very different from each other and also require different sets of skills (Reynolds and Warfield, 2010). Leaders are seen as innovators, they ask what and why, they focus on people, have long-term perspectives, develop and inspire trust, challenge the status quo, originate, and show originality (Reynolds and Warfield, 2010). Managers on the other hand are seen as administrators. Managers ask how and when, they focus on the system, rely on control, they maintain, and have a short-term perspective. They also accept the status-quo, imitate, and copy (Reynolds and Warfield, 2010). Traditionally in organisations, when one would refer to management, organisations were characterised by a strong emphasis on strict organisational structures and economic principles (Mostert & Rathbone, 2007). However, today, management has to be led by excellent change managers and most importantly, excellent managers of human capital. This means organisations have to see employees as their most valuable asset, exceeding the importance of organisational structures and economic principles such as efficiency, cost reduction, and cash flow (Mostert, 2007). Aron (2001) found that companies with high quality human capital perform better in the marketplace and bring higher and more consistent returns to shareholders than companies with mediocre workers. Recent studies have indicated that the modern manager's focus has shifted towards the management of human capital, but it is still a very difficult task in the competitive and uncertain circumstances in which organisations are currently operating (Mostert & Rathbone, 2007).

Increased uncertainties, such as extreme levels of competitiveness in terms of clients, contracts and resources; and changing legislation referring to the hard drive for employment equity, could lead to managers finding it more difficult and challenging to motivate and retain employees (Mitchell, 2002). There is also the risk that organisations will undoubtedly experience extreme financial restrictions if their employees are dissatisfied with their jobs, not committed to the organisation and continuously absent from work (Goetzal, Guindon, Turshen, & Ozminskowski, 2001). It is therefore expected of management not to limit its focus only to aspects such as productivity, financial profit, and the management of employees, but also to focus on improving those elements of the job that would lead to its employees feeling energetic, dedicated, and engaged in their work (Mostert, 2007). Ultimately, such positive feelings should also contribute to the limitation of employee's turnover intentions.

Previous studies found that the direct manager, whether a front-line supervisor or senior manager, has the most power in the organisation to limit unwanted turnover (Kreisman, 2002). The reason for this seems to be that the factors driving employee satisfaction and commitment fall within the direct manager's control (Kreisman, 2002). Factors driving employee satisfaction and commitment include giving feedback and recognition, providing opportunities to learn and develop, ensuring fair compensation that reflects an employee's contributions and value to the organisation, a good work environment, and most importantly, recognition and respect for the uniqueness of each person's competencies, needs, and desires (Kreisman, 2002). To ensure organisation maintains a competitive advantage in terms of human capital, it is crucial for management to retain the core business employees which, in the case of the mining industry, includes employees with scarce and critical skills.

Scarce and critical skills are popular terms many people use but are not always clearly defined. For the purpose of this study, scarce and critical skills will be defined in accordance with the National Skills Development Strategy (Mdladlana, 2007). A scarce skill is defined as one for which an absolute or relative demand exists, currently or in future. It implies that skilled, qualified and experienced people are needed to fill specific roles, occupations or specialisations in the labour market (Mdladlana, 2007). The absolute demand for scarce skills according to the Skills Focus Group (2006) refers to the employment of suitably skilled people that are not immediately available, an example in this case would be the emerging of a new occupation, there are few, if any, people in the country with the required skills. An absolute demand also refers to scenarios where the organisation is unable to implement planned growth strategies and experiencing productivity, service delivery and quality problems due to a shortage of skilled people (Skills Focus Group, 2006).

The relative demand for scarce skills are based on the Skills Focus Group (2006) and refers to suitably skilled people available but they do not meet other employment criteria's, like the geographical location - people are unwilling to work outside of cities. Secondly the equity considerations - there are few if any candidates with the required skills from specific cultural groups available to meet the skills requirements of the organisation. Replacement demand would reflect a relative scarcity if there are people in the process of education and training (formal and work-place) to acquiring the necessary skills (qualification and experience) but they are not available in the short term to meet replacement demand (Skills Focus Group,

2006). In the mining industry in which this study was conducted, scarce skills refer to the competencies necessary in occupations such as mining technical services rendered by employees such as rock engineers, geologists and surveyors, engineers, artisans, safety officers and environmentalists.

The term *critical skills* is defined as specific competencies needed within an occupation to perform this role successfully, which would include competencies such as general management skills, communication and customer skills, teamwork skills, and communication technology skills (Mdladlana, 2007). Critical skills, also refer to the demand for an element of the practical, foundational or reflexive competence that allows for specialization within roles/professions or occupations and includes specific “top-up” skills (Skills Focus Group, 2006). The concept *critical skills* specifically in the mining industry refers to competencies of employees in production and include those that are miners, shift supervisors, mine overseers and section managers (Workplace Skills Plan, 2008).

Workers with scarce and critical skills are valuable assets that, together, form an important part of an organisation’s worth. Aron (2001) stresses that the movement to the new economy has created the free-agent market for skilled people. The retention of key staff has been viewed as a major cause of the war for talent for a very long time now (Tulgan, 2001). The job mobility of executives and knowledge workers is increasing into a never-ending series of battles as companies find their best employees, more specifically their future senior executives, under constant attack (Chambers, Foulon, Handfield-Jones, Hankin, & Michaels, 1998). The cut in core business employees limits an organisation’s ability to compete in the knowledge era. Bussin (2002) reports that the issue of increasing retention and decreasing turnover has become a dominant part of organisational life, and that attracting and retaining key talent has become a critical organisational competency. It is recommended that companies accept the challenge of creating an environment that will attract, boost, and commit workers to the organisation and its objectives, mostly this falls to the responsibility of management (Sutherland, 2004).

The aforementioned causes the following question to arise: If the manager has the control to limit unwanted turnover, then why are organisations still losing their employees with scarce and critical skills? From the above it is safe to make the assumption that there is a need to determine what the reasons are for core business employees to terminate their employment

with the organisation. The mining industry is currently experiencing extensive turnover by employees with scarce and critical skills. Hence it is very important to determine what the causes are for these employees to leave the organisation. An internal survey conducted by one of the mining organisations' operations found that employees consider leaving the organisation due to issues related to management (Retention Brief, 2008). These specific issues were not identified. Thus the company could not benefit from this survey due to a lack of sufficient knowledge. The purpose of this study is to address this issue by focussing on specific managerial factors that influence the turnover intention of employees with scarce and critical skills in the mining industry with the aim of retaining these employees.

1.1.2 Literature review

It is safe to say that most people believe managers can have a major influence on the organisations they lead. In addition to the effects managers may have on the effectiveness of groups, managers may also have an impact on group members' attitudes and feelings (Canger & Smith, 2004). Due to the link between job satisfaction, attitudes (such as commitment) and turnover, several authors have reported the significant role managers play in the retention of key employees (Kaye & Jordan-Evans, 1999; Harris & Brannick, 1999). Interactional justice is one element managers can consider applying to retain key employees. Interactional justice refers to the interpersonal treatment people receive as procedures are implemented (Bies & Moag, 1986). Interactional justice is promoted when decision makers treat people with sensitivity and respect and explain the rationale for decisions carefully (Colquitt, 2001). Effective communications forms part of interactional justice and states that communication between supervisors and employees should be stressed to facilitate the process of strategic planning among executive leaders, managers, and front-line employees (Soonhee, 2002).

Effective communication between supervisor and employee is an important factor in informing employees of the objectives, job expectations or (new) organisational structures. In a study done by Ting (1996) it was found that effective communication with supervisors is significantly associated with job satisfaction. Supervisory communications might be a primary means to link the participative strategic planning process to employees' job satisfaction (Ting, 1996). Anderson, Corazzini and McDaniel (2004) found that greater levels of perceived communication openness, accuracy, and timeliness could lead to lower staff

turnover rates. Effective communication also includes recognition and giving feedback to employees.

Recognition forms part of motivation which is defined as what people will strive to achieve (Davidmann, 1998). According to Herzberg, Mausnek and Snydebman (1959), recognition is an intrinsic factor which motivates employees to a higher extent than salaries, working conditions and job security. Motivation towards better performance depends on the individual's need for recognition. The term recognition also includes money rewards. Davidmann (1998) stated that achieving goals leads towards feelings of self-respect, strength and confidence. Few people are successful in achievement without the added encouragement provided by others recognising their achievements (Davidmann, 1998). Continuous failure, frustration and defeat can lead to feelings of failure and a withdrawal from competitive situations. In a study conducted by (Lutgen-Sandvik, Riforgiate & Fletcher, 2011), recognition was the most frequent experience resulting in positive emotion at work. The study was only focused on those experiences in which others verbally expressed positive feedback to respondents, either privately or publicly. A constant lack of rewards and recognition lead to a view of society as being hostile and unrewarding (Davidmann, 1998). It was also found by Lutgen-Sandvik, Riforgiate and Fletcher (2011) that recognition made workers feel interpersonally significant, needed, unique, and particularly successful. In a study done by Herzberg (1966) it was found that recognition is seen as both a satisfier and dis-satisfier, which suggests that recognition could have both a positive and negative relationship with job satisfaction (House & Wigdor, 1967). To clearly understand this statement it is necessary to explain what is meant by satisfiers and dis-satisfiers. Those job characteristics, in this case recognition, that are important for, and lead to job satisfaction but not to job dissatisfaction are classified as "satisfiers," while those that are important for, and lead to, job dissatisfaction but not to job satisfaction are classified as "dissatisfiers" (House & Wigdor, 1967). This ultimately means that recognition could lead to both job satisfaction and job dissatisfaction. This study also found that a lack of support can cause frustration, job strain and burnout, which will cause lower levels of job satisfaction (House & Wigdor, 1967). A study conducted by Luthans and Stajkovic (2009) suggested that there are three positive reinforcements that can be used to improve employee behaviour and performance, these are money, recognition and feedback.

Feedback is defined as the degree to which the employee receives clear information about his or her performance from supervisors or from co-workers (Hackman & Oldham, 1975). Bakker, Demerouti and Schaufeli (2003) found that employees are less likely to leave the organisation when they receive social support and feedback on employee performance. In a study conducted by Anseel and Lievens (2007), it was found that an employee's perception of his/her supervisor feedback environment ["the contextual aspects of day-to-day supervisor-subordinate and coworker-coworker feedback processes rather than a formal appraisal feedback session" (Steelman, Levy & Snell, 2004, p. 166)] related strongly to the quality of the relation with his/her supervisor, which was in turn related to job satisfaction.

Churchill, Ford and Walker (1974), conducted the earliest studies on job satisfaction by which they examined the extrinsic and intrinsic nature of a job, and started the consequential research on job satisfaction of salespeople. Churchill et al. (1974) defined job satisfaction as all job characteristics itself and the work environment (industrial) salesmen find fulfilling, rewarding, and satisfying, or frustrating and unsatisfying. Other definitions were developed by Clark and Oswald (1996) and Hom and Kinichi (2001), who stipulated that job satisfaction refers to a subjective concept and positive emotional reaction of the individual and it provides the best measure of the value individuals perceive themselves as gaining from the job, taking into consideration the things they want and value. It is recognised that job satisfaction is influenced by numerous job-related factors such as pay, benefits, conditions of employment, relationships with supervisors and colleagues and fundamental benefits individuals perceive themselves as receiving from doing the job (Pienaar, Sieberhagen & Mostert, 2007; Sloane & Williams, 2000). Ishitani (2010) also stated that job satisfaction consists of two components: (1) extrinsic job satisfaction (namely, satisfaction with pay, job security, working condition, fringe benefits, recognition and status), and (2) intrinsic job satisfaction (namely, employees' satisfaction with the work itself and the opportunities provided for personal growth).

A large amount of research has been conducted concerning the relationship between job satisfaction and turnover, with and sometimes without the organisational commitment variable (Msweli-Mbanga, 2004). Various studies have shown the impact both job satisfaction and organisational commitment have on turnover intentions (Martin & Roodt, 2008). Organisational commitment and job satisfaction are seen to be very important components of turnover models because their empirical relationship with voluntary turnover

has been established through numerous meta-analyses in which a negative relationship with turnover intentions has continually been illustrated (Cohen, 1993; Lee, Carswell & Allen, 2000; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Steel & Ovalle, 1984; Tett & Meyer, 1993; and Yin & Yang, 2002). It was found by Mathieu and Zajac (1990) that organisational commitment has been reported to mediate the relationship between job satisfaction and turnover. It was reported later by Bakker, Demerouti and Schaufeli (2003) that the greater the job satisfaction, the lower the possibility that the individual will leave the organisation and, the higher the commitment levels of the employee, the lower the expected turnover intentions. Organisational commitment and job satisfaction are also positively related (Martin & Roodt, 2008). Another perspective developed by MacKenzie, Podsakoff and Ahearne (1998) is that job satisfaction is directly linked to the employee's intention to leave the organisation, indicating that turnover is likely to be reduced when employees are satisfied with their jobs. Podsakoff, Ahearne and MacKenzie (1997) also advanced this argument and suggested that performance could be increased and intention to leave the organisation could be reduced by making the work context more pleasant and supportive.

Although previous studies found that job satisfaction is an important direct predictor of individuals' intentions to leave the organisation, this intention may be affected when the individual feels that he or she is receiving support from the supervisor (Brough & Frame, 2004; Eisenberger, Stinglahamber, Vandenberghe, Sucharski & Rhoades, 2002). It was shown that support from the supervisor has been a stronger predictor of positive outcomes than for example support from colleagues (Kirk-Brown, 1999, Mayes, 1986). This is supported by later studies in which it was found that the reason for this seems to be that the factors driving employee satisfaction and commitment fall within the direct manager's control (Kreisman, 2002). It can also be linked to the fact that the supervisor is usually in a better position than colleagues to do something about improving the individual's negative work experiences (Thompson, 2005).

Brough and Frame (2004) defined social support as an important resource that has been associated with positive individual and organisational outcomes. Another definition by McIntosh (1991) states that when social support and actual resources are available to one individual from another, it will support the first individual in dealing with stress and improving wellbeing. These resources include emotional support, practical assistance, or

support in the form of materials (Kessler, 1992). It also refers to resources such as colleagues, supervisor, family and friends (Brough & Frame, 2004). Brough and Frame (2004) found that effective supervisor support definitely influences job satisfaction and the retention of employees. However, the different sources of support have only recently been tested (Brough & Kelling, 2002; Voydanoff, 2002). The amount of social support an individual perceives has been shown to be associated with lower experiences of depression (Brown & Harris, 1978), strain (Stotland & Pendleton, 1989) and turnover intention (Furnham & Walsh, 1991; Hatton & Emerson, 1993).

Jones (1989) and Limbert (2004) stated that social support at work is also acknowledged as an important contributor to individuals' experience of job satisfaction. Increased social support usually results in higher levels of job satisfaction and organisational commitment (Furnham & Walsh, 1991), and improves mental wellbeing (Buunk & Verhoeven, 1991). Later studies indicated that supervisor support is negatively associated with turnover (Brough & Frame, 2004). It shows that low levels of supervisor support are related to higher turnover intentions. It was also found that there is a direct relationship between social support and job satisfaction (Perrewe & Carlson, 2002; Viswesvaran, Sanchez, & Fisher, 1999). Social support at work has been noted as an important moderator in the conversion of work stress into individual outcomes (Kirmeyer & Dougherty, 1988). It is generally acknowledged that social support will influence strains in lessening their outcome in terms of stress, although the direct effects of social support in justifying strains are also supported (Beehr, King, & King, 1990).

Studies of turnover initially attracted attention due to the negative impact turnover has on organisational effectiveness (Pienaar, Sieberhagen, & Mostert, 2007). Planned turnover behaviour has been indicated as the best indicator of actual consequential turnover behaviour (Lee & Mowday, 1987). The objective of this study is to investigate the influence manager behaviour – with specific reference to interactional justice, recognition, feedback and support – has on job satisfaction and turnover intentions of employees with scarce and critical skills in the mining industry. The overall purpose is to provide information regarding these constructs to enable management to act proactively in retaining their employees with scarce and critical skills. This study is based on the Job Characteristics Model of Hackman and Oldham (1974) and the Model of Stress developed by Palmer, Cooper and Thomas (2001).

The problem described above can be placed within the theoretical framework of the Job Characteristics Model, which is based on the work of Herzberg (1966), Turner and Lawrence (1965), Blood and Hulin (1967) and Hulin and Blood (1968). All of the aforementioned researchers studied the relationship between specific objective qualities of tasks and employees' reactions to their work. On the basis of these works, Hackman and Oldham (1974) developed the theory that the job itself should be designed to have fundamental characteristics needed to create conditions for high work motivation, satisfaction and performance. The concepts of their Job Characteristics Theory are diagrammed in Figure 1.

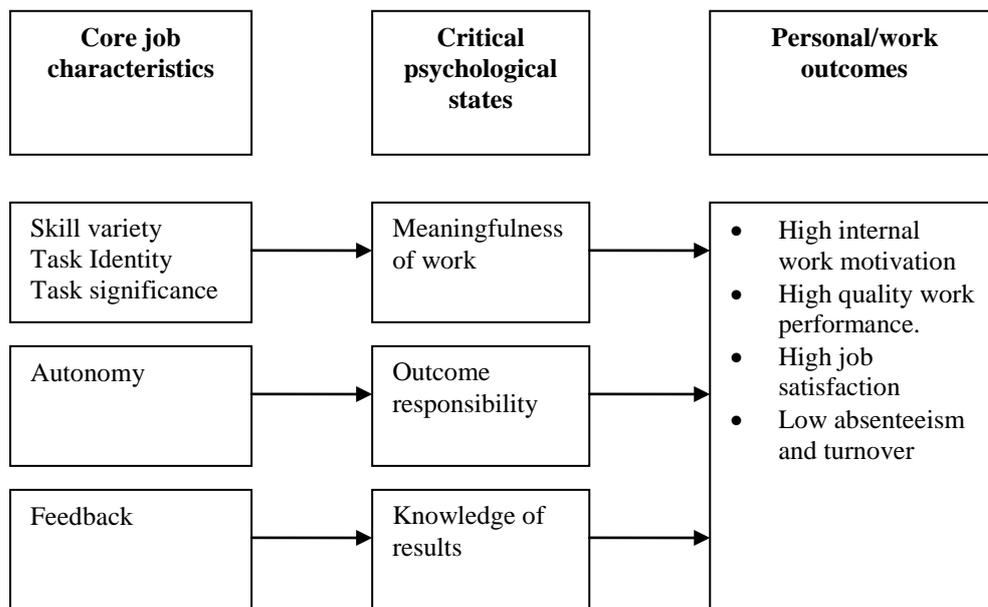


Figure 1. The Job Characteristics Model (Hackman & Oldham, 1974).

Figure 1 illustrates the relationships among the core job dimensions, the critical psychological states, and personal/work outcomes as illustrated by Hackman and Oldham (1974). Hackman and Oldham began their study by searching for the basic psychological states that lead to high-performance, motivation and satisfaction at work. The three conditions they suggested were: (a) a person must experience work as meaningful, generally valuable and worthwhile; (b) a person must experience responsibility for the results of the work, which implies that he/she must feel personally accountable and responsible for the work results; (c) a person must have knowledge of the final results of the work being done, thus understanding the effectiveness of his/her job performance.

The variables within this model which will be focused on are feedback from managers and recognition can also fall within this model. The purpose of the before mentioned variables is to determine whether knowledge of results may be associated with employees feeling higher levels of job satisfaction and in turn lower levels of turnover intention. This will contribute to implementing methods of retaining employees with scarce and critical skills. There will also be focused on Palmer and Cooper's (2004) model of stress to identify a theoretical framework for other variables in this study. The variables of interactional justice, support and recognition fall within this model.

Palmer, Cooper and Thomas (2001) developed a simple model of stress that could be used to explain the relationship between the main stress-related hazards, the organisational and individual symptoms, and the outcomes of their interaction in meeting objectives (HSE, 2001). This model of stress was then updated and revised (Palmer, Cooper & Thomas, 2003) and has undergone further revision (Palmer & Cooper, 2004), following revised HSE Management Standards.

The HSE (2001) recommended assessing and addressing seven major hazards that can lead to stress for employees. One of the hazards, culture, has since been divided into six other hazards (HSE, 2004). However, as employees can relate to different aspects of culture, such as the long-hours culture or bullying culture, it is reflected in this model. Therefore culture is seen to influence or form part of the six main hazards. The six hazards are reflected in Figure 2 and are discussed below.

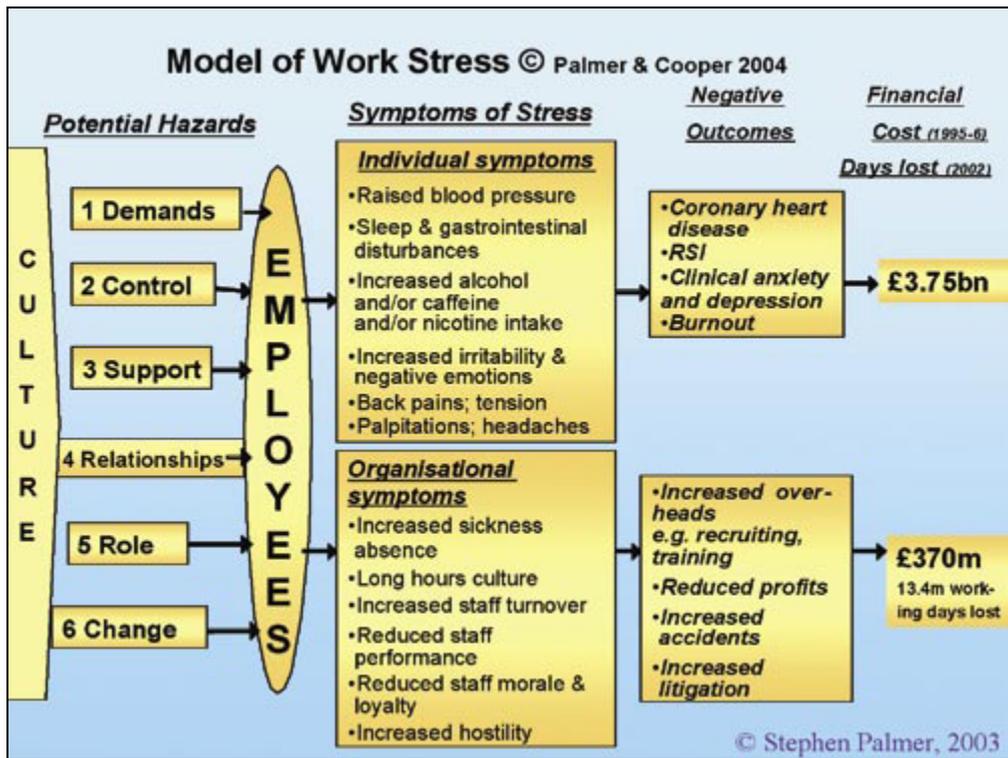


Figure 2: *Model of Work Stress* (Palmer and Cooper, 2004)

Demands include exposure to workload, work patterns and work environment-related issues (for example volume and complexity of work, shift work, unrealistic deadlines). Control refers to the degree to which the employee has a say and involvement in the way they do their work (for example control balanced against demands, lack of autonomy, and too much supervision). Support includes the encouragement, sponsorship and resources provided by the organisation, line management and colleagues (for example training for core functions of job; catering for individual differences). Relationships include encouraging positive work relationships to avoid conflict and dealing with unacceptable behaviour (for example bullying and harassment, conflicts). Role refers to whether people understand their role within the organisation and whether the organisation ensures that they do not have conflicting roles (for example conflicting roles avoided, vague job descriptions). Change refers to how organisational change (large or small) is managed and communicated within the organisation (for example staff understanding why change is necessary, little or no communication to staff, redundancy fears).

For this study, the focus will only be on the following two potential hazards, namely support and relationships. The variable of social support, specifically support and recognition from managers falls within the support hazard, which includes the encouragement of employees,

sponsorship and resources provided by management. Interactional justice (i.e. fair treatment) falls within the relationship of potential hazard. The relationship of potential hazard includes encouraging positive work relationships to avoid conflict and dealing with unacceptable behaviour. This also refers to situations in which decision makers treat people with sensitivity and respect and carefully explain the rationale for decisions (Colquitt, 2001).

The following research questions can be formulated based on the research problem:

- What is the relationship between manager behaviours (interactional justice/communication from the manager, feedback and recognition), social support, job satisfaction, and turnover of employees according to the literature?
- What is the relationship between manager behaviours (interactional justice/communication from the manager, feedback and recognition), social support, job satisfaction, and turnover of employees with scarce and critical skills in the mining industry?
- Can manager behaviours, social support, and job satisfaction be used to predict the turnover intention of employees with scarce and critical skills within the mining industry?
- Does social support moderate the relationship of manager behaviours and job satisfaction with turnover intention?
- What recommendations can be made for management to enable retention of employees with scarce and critical skills?

In order to answer the above research questions, the following research objectives are set.

1.2 RESEARCH OBJECTIVES

The research objectives are divided into a general objective and specific objectives.

1.2.1 General objective

The objective of this study is to investigate the influence manager behaviours – with specific reference to interactional justice, recognition, feedback and support – have on turnover intentions of employees with scarce and critical skills in the mining industry. The overall

purpose is to provide information regarding these constructs to enable management to act proactively in retaining their employees with scarce and critical skills.

1.2.2 Specific objectives

The specific objectives of this research are:

- To determine the relationship between manager behaviour (interactional justice, feedback and recognition), social support, job satisfaction, and turnover of employees according to the literature.
- To determine what the relationship is between manager behaviour (interactional justice, feedback and recognition), social support, job satisfaction, and turnover of employees with scarce and critical skills in the mining industry.
- To determine whether manager behaviour, social support, and job satisfaction can be applied to predict the turnover intention of employees with scarce and critical skills within the mining industry.
- To determine whether social support moderates the relationship of manager behaviour and job satisfaction with turnover intention.
- To formulate recommendations that can be made to management to enable retention of employees with scarce and critical skills.

1.3 PARADIGM PERSPECTIVE OF THE RESEARCH

In Kuhn's (1970) definition of a paradigm, he says that a paradigm primarily serves as an umbrella term for a number of related elements that constitute the scientific undertaking itself. It indicates a shared and accepted cluster of components of science, namely agreed-upon main theories and its closely related or intertwined concepts, sub-concepts, methods, and solutions as a shared scientific tradition at a more general level than that of individual scientific results. Therefore Kuhn (1970) sees the origination of a paradigm as a shared scientific tradition of theories (beliefs), methods and solutions.

A certain paradigm perspective that includes the intellectual climate and the market of intellectual resources (Lundin, 1996; Mouton & Marais, 1992) directs the research.

1.3.1 Intellectual climate

The intellectual climate refers to the series of non-epistemological value systems/beliefs underwritten in any given period in a discipline. It transfers to a collection of beliefs, values and assumptions that do not deal with the epistemological views of the scientific research practice directly because it usually originates in a non-epistemological context (Mouton & Marais, 1992).

1.3.2 Discipline

This research falls within the boundaries of the behavioural sciences and more specifically of Industrial Psychology. Industrial Psychology refers to the scientific study of people within their work environment. This implies scientific observation, evaluation, optimal utilisation and influencing of normal and to a lesser degree, deviant behaviour in interaction with the environment (physical, psychological, social and organisational) as manifested in the world of work (Munchinsky, Kriek, & Schreuder, 2002). Industrial psychology relates directly to psychology because industrial psychology is still profoundly influenced by clinical, counselling and educational psychologists with their psychoanalytical, behaviourist and humanist ideas (Watkins, 2001). Moreover, cognitivist, behaviourist and humanist theories, combined with the archetypes of psychoanalysis (id, ego and superego) also had a significant part to play in the field's theoretical foundation.

Industrial psychology consists of the sub-disciplines of Personnel psychology, Organisational psychology, Ergonomics, Vocational and Career psychology, Organisation development, Consumer behaviour, Employment relations and a new, not yet recognised field, Cross-cultural industrial psychology (Munchinsky, Kriek, & Schreuder, 2002). The sub-disciplines of Industrial Psychology focused on in this research are career psychology and organisational psychology.

Career psychology is focused on people who are thinking about careers, preparing for occupations and pursuing them, entering the world of work, changing occupations, and leaving the world of work to apply what knowledge and energies they have on activities that may reflect the work they did for pay or which may involve quite different types of knowledge and skill (Vondracek, 2001). Career psychology is relevant to this study when we

study the behaviour of employees as they plan to change occupations or leave the world of work. It is also relevant because it is part of the aim of this study to determine which factors drive employees to consider alternative employment; thus what influences employees' turnover intentions.

Organisational psychology refers to the influence the organisation has on attitudes and behaviour of people associated with them, and almost all employees work within some organisational context (Muchinsky, Kriek & Schreuder, 2002). Work in this context refers to factors such as role-related behaviour, pressures groups can impose on individuals, personal feelings of commitment to an organisation, and patterns of communication within an organisation. Organisational behaviour research has a strong focus on social influence because the organisations are social collective (Muchinsky, Kriek & Schreuder, 2002). Organisational psychology is specifically relevant to this study with regard to the influence pressures, specifically the influence manager behaviour has on turnover intention, within the organisation have on the behaviour of employees, which is the objective of this study. This sub-discipline also has an influence on the level of job satisfaction employees will experience within the organisation.

1.3.3 Meta-theoretical assumptions

Three paradigms are relevant to this research. Firstly, the literature review is done within the humanistic paradigm and secondly, the empirical study is done within the functionalistic and positivistic paradigms.

1.3.3.1 Literature review

The humanistic paradigm is a school of thought that emphasises that people are free agents who have the ability to make choices, be intentional and aware during their actions. According to this paradigm, people can be affected by their relationships with others, and they are more than just the sum of their parts. This is considered an essential criterion for psychological health (De Carvalho, 1991).

1.3.3.2 Empirical study

The first paradigm this study will be based upon is the functionalist paradigm which holds the perspective that the social world views society as ontologically prior to man and seeks to position man and his activities within that wider social context (Burrell & Morgan, 1979). Functionalism is characterised by an apprehension for providing explanations of the status quo, social order, social integration, consensus, need satisfaction, solidarity, and actuality (Zeichner & Gore, 1990). This paradigm focuses on the general sociological concerns from a standpoint which tends to be realistic, positivistic, deterministic, and nomothetic (Burrell & Morgan, 1979). Functionalism is based on a conception of science that stresses the possibility of objective investigation capable of providing true explanatory and predictive knowledge of an external reality (Zeichner & Gore, 1990). Functionalists assume that the standpoint of the observer attempts "to relate what they observe to what they regard as important elements in a wider social context" (Burrell & Morgan, 1979, p. 107).

The second paradigm is the positivistic paradigm and is defined by Burrell and Morgan (1979) as an epistemology which seeks to explain and predict what happens in the social world by searching for regularities and causal relationships between its constituent elements. The positivistic theory is a theoretical and general scientific position that stresses parsimony and operationalism in data and language and disregards theorising and inference – in short, any method that produces positive knowledge (Lundin, 1996). Positivism recognises natural phenomena or properties of knowable things, along with their lawful relations of coexistence and succession. The positivist believes that relationships are discovered only by observation and experiment (Lundin, 1996).

1.3.4 Market of intellectual resources

The market of intellectual resources refers to that collection of beliefs that directly involves the epistemological status of scientific statements. The two main types of epistemological beliefs are the theoretical beliefs and the methodological beliefs (Mouton & Marais, 1992).

1.3.4.1 Theoretical beliefs

Theoretical beliefs can be defined as all beliefs that can make testable judgments regarding a social phenomenon. These are all judgments regarding the ‘what’ and ‘why’ of human phenomena and include all conceptual definitions and all models and theories of the research (Mouton & Marais, 1992).

A. Conceptual definitions

The relevant conceptual definitions are given below:

Interactional justice

Interactional justice is defined as the interpersonal treatment people receive as procedures are enacted. Interactional justice is fostered when decision makers treat people with respect and sensitivity and explain the rationale for decisions thoroughly (Colquitt, 2001).

Feedback

Feedback is defined as the degree to which the employee receives clear information about his or her performance from supervisors or from co-workers (Hackman & Oldham, 1975).

Recognition

Herzberg (1959) defines recognition as an intrinsic factor of motivation that produces good feelings about the job and does not necessarily have to come from superiors; it might come from peers, customers, or subordinates. Where recognition is based on achievement, it provides more intense satisfaction (Herzberg, 1959).

Job satisfaction

Job satisfaction is the affective component in the model of Hellgren, Sjöberg and Sverke (2000) and is described as a positive emotional state reflecting affective reactions to the perceived content and characteristics of specific facets of the job situation (Hellgren et al., 2000).

Social support

There are two types of social support: (1) tangible support which refers to medical services and financial aid and (2) emotional support such as love, affection, sympathy, understanding, friendship or intimacy provided by another person or group (Caplan, Cobb, French, Van Harrison & Pinneau (1980). The focus in this research falls more towards the emotional aspects of support from supervisors and colleagues.

Turnover intention

Turnover intention is defined by Hellgren et al. (2000) as the propensity of an employee to withdraw from the job. It represents the conative dimension of attitude in their model of the turnover process.

B. Models and theories

A model is aimed at ways of answering questions. It tries to reproduce the dynamics of an occurrence through the relation between the main elements in a process and to represent it in a simplified way (Mouton & Marais, 1992). A theory is defined as a set of interrelated constructs (concepts), definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena (Mouton & Marais, 1992).

The objective of this study is to investigate the influence manager behaviour – with specific reference to interactional justice, recognition, feedback and support – has on job satisfaction and turnover intentions of employees with scarce and critical skills in the mining industry. The overall purpose is to provide information regarding these constructs to enable management to perform proactively in retaining their employees with scarce and critical skills.

Feedback is conceptualised within the Job Characteristics Model of Hackman and Oldham (1974), in which the focus lies on whether knowledge of results will lead to higher levels of job satisfaction and lower levels of turnover.

Social support, recognition and interactional justice fall within Palmer and Cooper's (2004) model of stress. This model's view on social support and recognition emphasises the

encouragement of employees, sponsorship and resources provided by management to employees. The model of stress' view on interactional justice is covered in the relationship hazard and focuses on encouraging positive work relationships to avoid conflict, and on dealing with unacceptable behaviour.

1.3.4.2 Methodological beliefs

Methodological beliefs can be defined as beliefs that make judgments regarding the nature and structure of science and scientific research (Mouton & Marais, 1992). The empirical study is presented within the functionalist and positivistic frameworks/paradigms.

The root assumptions of the functionalist framework are:

- There is a possibility of objective inquiry capable of providing true explanatory and predictive knowledge of an external reality (Zeichner & Gore, 1990).
- To relate what one observes to what one regards as important elements in a wider social context (Burrell & Morgan, 1979).

The root assumption of the positivistic framework is that relationships are discovered only by observation and experiment (Lundin, 1996).

1.4 RESEARCH METHOD

This research, pertaining to the specific objectives, consists of two phases, namely a literature review and an empirical study.

1.4.1 Phase 1: Literature review

In phase 1 a complete review is done. The sources to be consulted include:

- Articles
- Journals
- Internet
- Books

1.4.2 Phase 2: Empirical study

The empirical study consists of the research design, participants, measuring battery, and statistical analysis.

1.4.2.1 Research Design

According to Kerlinger and Lee (2000), the main technical function of any research design is to control variance. Research designs are plans and structures used to answer research questions. Research designs act in conjunction with research hypotheses to yield a dependable and valid answer.

Exploratory research can be defined as research into an area that has not been studied and in which a researcher wishes to develop initial ideas and a more focussed research question (Struwig & Stead, 2001). During the exploratory research stage the researcher investigates a problem about which little is known. The major purpose of exploratory research is the development and clarification of ideas and the formulation of questions and hypotheses for more precise investigation later. This type of research involves gathering a great deal of information from a small sample (Struwig & Stead, 2001).

Descriptive research attempts to describe something, e.g. the demographic characteristics of the users of a given product and the degree to which product use varies with income, age, sex, etc. In contrast to the exploratory research – where flexibility characterises the research – descriptive studies are an attempt to provide a complete and accurate description of a situation (Struwig & Stead, 2001).

The specific design that will be used is a cross-sectional survey design to collect the data and to reach the research objectives. During a cross-sectional design, a group of people is observed at one point in time, in a brief period, such as a day or a few weeks (Du Plooy, 2001). A cross-sectional survey has the economic advantage of saving money and time. There is no need for the researcher to struggle with the complexity and cost of maintaining contact with participants over a long period of time, since they are only needed for one period of data collection (Baltes, Reese & Nesselroade, 1988). It is practically useful for

organisations and not scientifically problematic (Cartwright & Cooper, 2002). The data can be used to assess the prevalence of certain variables in a population, which will be beneficial to this study.

1.4.2.2 Participants

A purposive sample will be used for the purpose of this study. This sample is the most appropriate due to the fact that this study is specifically focused on employees with scarce and critical skills identified by the workplace skills plan. Therefore only employees with these specific characteristics will be included in this study. This type of sample will address the problem of turnover by employees with scarce and critical skills, which currently is a major concern in organisations. By using this type of sampling one is able to determine what drives employees with scarce and critical skills to leave the organisation. Employees with scarce and critical skills at Anglo Platinum will be approached for this study. The total population of employees with scarce and critical skills equals 505.

1.4.2.3 Measuring Battery

The following instruments were used in this empirical study:

Interactional justice

This scale is based on Colquitt (2001) and measures the degree to which the supervisor applies clear and open communication in relation to the employee (e.g. “*My manager has an open communication with me*”). A high score indicates clear and ample communication, and the response alternatives range from 1 (disagree) to 5 (agree). The reported Cronbach alpha coefficient for this scale is 0,92 (Colquitt, 2001), measured with 5 items.

Personal Feedback

Feedback is defined as the degree to which the employee receives clear information concerning his or her performance from supervisors or from co-workers (Hackman & Oldham, 1975). In order to capture the extent to which the employees could, or had to, determine themselves when their tasks were completed, four items were developed, based on Hackman and Oldham (1975). This specific scale captures whether respondents receive feedback from the supervisor on how they have carried out their work. A high score on this scale reflects that the individual feels he or she has a sense of what his/her tasks entail, and

when they can be considered to be complete (e.g. *“I usually know whether or not my work is satisfactory on this job”*). The response alternatives range from 1 (disagree) to 5 (agree). The reported Cronbach alpha coefficient for this scale is 0,75 (Hackman & Oldham, 1975), and was measured with 4 items.

Recognition

Items will be developed and used to measure the degree of recognition employees receive from supervisors. This measure will aim to capture whether respondents receive recognition from their respective supervisor on how they have carried out their work (e.g. *“I regularly receive recognition for work well done”*). The response alternatives will range from 1 (disagree) to 5 (agree), where a high score indicates that the supervisor gives recognition. Items were tested for face validity with the study leader, and finally it was decided to measure this construct with 5 items. Determining the reliability of this measure presents a unique contribution of the current investigation.

Job satisfaction

Job satisfaction was measured by means of a scale developed by Hellgren, Sjöberg and Sverke (1997), based on the work of Brayfield and Rothe (1951). This scale consists of three items measuring satisfaction with the job (e.g. *“I enjoy being at my job”*). The response alternatives range from 1 (disagree) to 5 (agree), where a high score reflects satisfaction with the job. The reported Cronbach alpha coefficient for this scale is 0,86 (Hellgren et al., 1997), and is measured with 3 items.

Social support

Social support will be measured with a scale developed by Caplan et al. (1975), and consists of three items that measure support, based on the source thereof – in this case, Supervisor support (3 items, e.g. *“I always receive help from my manager when difficulties in my work arise”*). The response scale ranges from 1 (disagree) to 5 (agree), where a higher score on the scale reflects a larger sense that support is available. Caplan et al. (1975) reported satisfactory reliability Cronbach’s alpha coefficient of these scales ranging from 0,73 to 0,83.

Turnover intention

This scale, consisting of three items, was developed by Sjöberg and Sverke (2000), and measures the strength of the respondent's intention to leave the present position (e.g. "*I feel that I could leave this job*"). The response alternatives range from 1 (disagree) to 5 (agree) and a high score reflects a strong intention to leave the job. The reported Cronbach alpha coefficient for this scale is 0,83 (Sjöberg & Sverke, 2000), and it is measured with 3 items.

1.4.2.4 Statistical Analysis

The statistical analysis will be carried out with the help of the SPSS-program (SPSS, 2003). The program will be used to do statistical analysis regarding the reliability and validity of the measuring instruments and descriptive statistics. Cronbach alpha coefficients will be used to assess the reliability and validity of the measuring instruments (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) and inferential statistics will be used to analyse the data. A cut-off point of 0,30 (medium effect) (Cohen, 1988) was set for the practical significance of correlation coefficients.

1.4.2.5 Ethical considerations

There are many instances where the researcher can engage in unethical conduct. Some of the more common types of unethical behaviour are listed below and they include (Struwig & Stead, 2004):

Informed consent: Before I conduct my study I will ensure that the participants voluntarily agree to participate in the research. The participants need to be informed that they are free to refrain from participating and may withdraw at any point in the research process.

Confidentiality: One is expected to respect the confidentiality of the participants and others involved in one's research project. If confidentiality cannot be guaranteed or can only be partially maintained the participants have to be informed regarding this possibility prior to commencement of the study. Confidentiality can be observed by requesting the participants not to provide their names and not to write them on the questionnaire.

Deception: Deception refers to misleading participants in such a way that, had they been aware of the nature of the study, they may have declined to participate in it. The researcher will inform the participants about this study, concerning what the aim of this study is and clarify areas which may come across as misleading.

Plagiarism: Plagiarism means using the work of others without proper acknowledgement of their contribution. The researcher will use the APA style for referencing the work of others, and in doing so, avoid plagiarism.

1.5 CHAPTER DIVISION

The chapters in this mini-dissertation are presented as follows:

Chapter 1: Research proposal and problem statement.

Chapter 2: Research article.

Chapter 3: Conclusions, limitations and recommendations.

1.6 CHAPTER SUMMARY

Chapter one contained the overview of the research problem and also an introduction and description of all variables. Definitions were given of all variables and of scales to be used to measure these variables. In chapter two a more in-depth description will be given of the relevant variables and research literature. This description will also focus on the analysis and discussion of the collected data.

REFERENCES

- Abrahamson, E. (2004). *Change without pain: how managers can overcome initiative overload, organisational chaos, and employee burnout*. Boston, MA: Harvard Business School Press.
- Anderson, R. A., Corazzini, K. N., & McDaniel, R. R. Jnr. (2004). Complexity science and the dynamics of climate and communication: Reducing nursing home turnover. *Gerontologist, 44*(3), 378–388.
- Anglo Platinum Union Mine. (June, 2008). *Retention Brief, 2008*. Swartklip, RSA: Anglo Platinum Union Mine.
- Anglo Platinum Union Mine. (June, 2008). *Annual Training Report and Workplace Skills Plan (2008)*. Johannesburg, RSA: Mine Qualifications Authority.
- Anseel, F., & Lievens, F. (2007). The long-term impact of the feedback environment on job satisfaction: A field study in a Belgian context. *Applied Psychology: An International Review, 56*(2), 254–266.
- Aron, K. (2001). *Factors influencing the retention of knowledge workers at Investec Bank Limited*. Unpublished MBA Research Report, Johannesburg: Henley Management College.
- Asad, S., & Dainty, A. R. J. (2005). Job motivational factors for disparate occupational groups within the UK construction sector: A comparative analysis. *Journal of Construction Research, 6*(2), 223–236.
- Bainbridge, C. (1996). *Designing for change: A practical guide to business transformation*. Chichester, West Sussex: Wiley.
- Bakker, A. B., Demerouti, E., & Schaeffeli, W. B. (2003). Dual processes at work in a call centre: An application of the job demands – resources model. *European Journal of Work and Organizational Psychology, 12*(4), 393–417.
- Baltes, P. B., Reese, H. W., & Nesselroade, J. R. (1988). *Introduction to research methods, life-span developmental psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates, Incorporated.
- Beehr, T. A., & McGrath, J. E. (1992). Social support, occupational stress and anxiety. *Anxiety, Stress and Coping, 5*, 7–19.
- Beehr, T. A., King, L. A., & King, D. W. (1990). Social support and occupational stress: Talking to supervisors. *Journal of Vocational Behavior, 36*, 61–81.
- Blood, M. R., & Hulin, C. L. (1967). Alienation, environmental characteristics, and worker responses. *Journal of Applied Psychology, 51*, 284–290.

- Bowden P., Cattell, K., Mitchell, K., & Distiller, G. (2008). Job satisfaction of South African quantity surveyors: Is salary a significant factor? *Journal of Contemporary Management*, 5, 13–38.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307–311.
- Brill, P. L., & Worth, R. (1997). *The four levers of corporate change*. New York: Amacom.
- Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: The role of social support and police organisational variables. *New Zealand Journal of Psychology*, 33(1), 8–16.
- Brough, P., & Kelling, A. (2002). Women, work and well-being: An analysis of the work-family conflict. *New Zealand Journal of Psychology*, 31, 29–38.
- Brown, G., & Harris, T. (1978). *Social origins of depression: A study of psychiatric disorders in women*. New York: Free Press.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organizational analysis*. London, UK: Heinemann.
- Bussin, M. (2002). *Retention strategies: Remuneration answers*. Johannesburg: Knowledge Resources.
- Buunk, B. P., & Verhoeven, K. (1991). Companionship and support at work: A micro-analysis of the stress-reducing features of social interaction. *Basic and Applied Social Psychology*, 12, 243–258.
- Canger, J. M., & Smith, M. A. (2004). Effects of supervisor “big five” personality on subordinate attitudes. *Journal of Business and Psychology*, 18(4), 465–481.
- Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau, S. R. (1975). *Job demands and worker health: Main effects and occupational differences*. Washington, DC: United States Department of Health, Education and Welfare.
- Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau, S. R. (1980). *Job demands and worker health: Main effects and occupational differences*. University of Michigan, Michigan.
- Cartwright, S., & Cooper, C. L. (2002). *ASSET: An organizational stress screening tool. The Management guide*. Manchester: RCL.
- Chambers, E. G., Foulon, M., Handfield-Jones, H., Hankin, S. M., & Michaels, E. G. III (1998). The war for talent. *The McKinsey Quarterly*, (3), 44–57.
- Churchill, G. A., Ford, N. M. & Walker, O. C. (1974). Measuring the job satisfaction of industrial salesmen. *Journal of Marketing Research*, 11: 250–260.

- Clark, A. & Oswald, A. (1996). Satisfaction and comparison income. *Journal of Public Economics*, 61, 359–381.
- Cohen, A. (1993). Organizational commitment and turnover: A meta-analysis. *Academy of Management Journal*, 36(5), 1140–1157.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86(3), 386–400.
- Cravens, D. W., Low, G. S., & Moncrief, W. C. (2001). The role of satisfaction with territory design on the motivation, attitudes, and work outcomes of salespeople. *Journal of the Academy of Marketing Science*, 29(20): 165–178.
- De Carvalho, R. J. (1991). *The founders of humanistic psychology*. New York: Praeger.
- Du Plooy, G. M. (2001). *Communication research: Techniques, methods and applications* (2nd ed.). Juta and Company Limited.
- Eisenberger, R., Stinglahanber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organisational support and employee retention. *Journal of Applied Psychology*, 87, 565–573.
- Elangovan, A. R. (2001). Causal ordering of stress, satisfaction and commitment, and intention to quit: A structural equations analysis. *Leadership and Organization Development Journal*, 22(4):159–165.
- Fairfield-Sonn, J. W., Ogilvie, J. R., & Del Vecchio, G. A. (2002). Mergers, acquisitions and long-term employee attitudes. *The Journal of Business and Economic Studies*, 8(2): 1–16.
- Forsyth, D. R. (1998). *Group Dynamics* (3rd ed). Belmont, CA.
- Furnham, A., & Walsh, J. (1991). Consequences of personorganisation incongruence: Absenteeism, frustration, and stress. *The Journal of Social Psychology*, 31, 187–204.
- Ganster, C. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology*, 71, 102–110.
- Goetzel, R. Z., Guindon, A. M., Turshen, I. J., & Ozminkowski, R. J. (2001). Health and productivity management: Establishing key performance measures, benchmarks, and best practices. *Journal of Occupational and Environmental Medicine / American College of Occupational and Environmental Medicine*, 43(1): 10–17.
- Hackman, J. R., & Oldham, G. R. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects* (Technical Report No. 4). Yale University: New Haven.

- Hackman, R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology, 60*(2), 159–170.
- Harris, J., & Brannick, J. (1999). *Finding and keeping great employees*. New York: AMACOM.
- Hatton, C., & Emerson, E. (1993). Organizational predictors of staff stress, satisfaction and intended turnover in a service for people with multiple disabilities. *Mental Retardation, 31*, 388–395.
- Health and Safety Executive (2001). *Tackling work related stress: A managers' guide to improving and maintaining employee health and wellbeing*. Sudbury: Health and Safety Executive.
- Health and Safety Executive (2004). *Real solutions, real people: A managers' guide to tackling workrelated stress*. Sudbury: Health and Safety Executive.
- Hellgren, J., Sjöberg, A., & Sverke, M. (1997). Intention to quit: Effects of job satisfaction and job perceptions. In F. Avallone, J. Arnold & K. de Witte (Eds.), *Feelings work in Europe* (pp. 415-423). Milano: Guerini.
- Herzberg, F. (1966). *Work and the Nature of Man*. Cleveland: World Publishing Company.
- Herzberg, F., Mausnek, B., & Snydebman, B. (1959). *The Motivation to Work* (Second Edition). New York: John Wiley and Sons.
- Hom, P. W., & Kinichi, A. J. (2001). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal, 44*, 975–987.
- House, R. J., & Wigdor, L. A. (1967). Herzberg's dual-factor theory of job satisfaction and motivation: A review of the evidence and a criticism. *Personnel Psychology, 369–389*.
- Hulin, C. L., & Blood, M. R. (1968). Job enlargement, individual differences, and worker responses. *Psychological Bulletin, 69*, 41–55.
- Jones, C.A. (1989). *Perceptions of emotional support, stress, and strain among African-American human service workers*. Paper presented at the 21st Annual Conference of the National Association of Black Social Workers. Richmond: VA.
- Kaye, B., & Jordan-Evans, S. (1999). *Love 'em or lose 'em: Getting good people to stay*. San Francisco: Berrett-Koehler Publishers, Inc.
- Ishitani, T. T. (2010) Exploring the effects of congruence and Holland's personality codes on job satisfaction: An application of hierarchical linear modelling techniques. *Journal of Vocational Behaviour, 76*, 16 – 24.

- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Fort Worth, TX: Harcourt College Publishers.
- Kessler, R. C. (1992). Perceived support and adjustment to stress: Methodological considerations. In H.O.F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support*. New York: Hemisphere.
- Kirk-Brown, A. (1999). *The relationship between work stressors, social support, and emotional exhaustion in female employees of the Queensland Police Service*. Paper presented at the Third Australian Industrial and Organisational Psychology Conference. Brisbane: Australia.
- Kirmeyer, S. L., & Dougherty, T. W. (1988). Work load, tension, and coping: moderating effects of supervisor support. *Personnel Psychology*, *41*, 125–139.
- Kreisman, J. B. (2002). Insight into employee motivation, commitment and retention. *Business Training Experts: Leadership Journal*, 1–24.
- Kuhn, T. S. (1970). *The structure of scientific revolution*. Chicago: University of Chicago Press.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with person- and work-related variables. *Journal of Applied Psychology*, *85*(5), 799–811.
- Lee, T. W., & Mowday, R. T. (1987). Voluntarily leaving the organization: an empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal*, *30*(4), 721–743.
- Limbirt, C. (2004). Psychological well-being and job satisfaction amongst military personnel on unaccompanied tours: The impact of perceived social support and coping strategies. *Military Psychology*, *16* (1), 37–51.
- Lundin, R. W. (1996). *Theories and systems of psychology* (5th ed). Lexington, MA: DC Heath and Company.
- Luthans, F. & Stajkovic, A.D. (2009). Provide recognition for performance management. Retrieved on 19 March 2011 from the World Wide Web, available at; <http://web.me.com/astajkovic>
- Lutgen-Sandvik, P, Riforgiate, S., Fletcher, C. (2011). Work as a source of positive emotional experiences and the discourses informing positive assessment. *Western Journal of Communication*, *75*(1), 2 – 27.

- MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing*, *62*, 224–247.
- Martin, A., & Roodt, G. (2008). Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, *34*(1), 23–31.
- Mathieu, J. F., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, *108*(2), 171–194.
- Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology*, *71*, 102–110.
- McIntosh, N. J. (1991). Identification and investigation of properties of social support. *Journal of Organizational Behavior*, *12*, 201–217.
- Mdladlana, M. (2007). Management College of South Africa Graduation Ceremony (Mancosa). Department of Labour. In press.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, *61*, 20–52.
- Mitchell, L. E. (2002). *Corporate irresponsibility — America's newest export*. New Haven & London: Yale University Press.
- Mostert, K., & Rathbone, A. D. (2007). Work characteristics, work-home interaction and engagement of employees in the mining industry. *Management Dynamics*, *16*(2), 36–52.
- Mouton, J., & Marais, H. C. (1992). *Basic concepts: Methodology for the behavioural sciences*. Pretoria: Human Sciences Research Council.
- Msweli-Mbanga, P. (2004). Predicting turnover behaviour of direct salespeople. *Southern Africa Business Review*, *8*(3), 14–25.
- Muchinsky, P. M., Kriek, H. J., & Schreuder, D. (2002). *Personnel psychology* (2nd ed.). South-Africa: Oxford University Press.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Palmer, S., Cooper, C., & Thomas, K. (2001). Model of organisational stress for use within an occupational health education/promotion or wellbeing programme – a short communication. *Health Education Journal*, *60*(4), 378–80.

- Palmer, S., Cooper, C., & Thomas, K. (2004). *A model of work stress to underpin the health and safety executive advice for tackling work-related stress and stress risk assessment*. Counselling at work (pp1–5). London.
- Perrewe, P. L., & Carlson, D. S. (2002). Do men and women benefit from social support equally? Results from a field examination within the work and family context. In Nelson, D. L. Nelson & R. J. Burke (Eds.), *Gender, work stress and health*. Washington: American Psychological Association.
- Pienaar, J., Sieberhagen, C. F., & Mostert, K. (2007). Investigating turnover intentions by role overload, job satisfaction and social support moderation. *SA Journal of Industrial Psychology*, 33(2), 62–67.
- Podsakoff, P. M., Ahearne M., & MacKenzie, S. B. (1997). Organisational citizenship behaviour and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82(2): 262–270.
- Reynolds, J. G, & Warfield, W. H. (2010). Discerning the differences between managers and leaders. *The Education Digest*, March 2010.
- Sager, J. K. (1990). How to retain salespeople. *Industrial Marketing Management*, 19, 155–166.
- Sager, J. K., Griffeth, R. W., & Hom, P. W. (1998). A comparison of structural models representing turnover cognitions. *Journal of Vocational Behaviour*, 53(2):254–273.
- Sjöberg, A., & Sverke, M. (2000). The interactive effect of job involvement and organizational commitment on job turnover revisited: A note on the mediating role of turnover intention. *Scandinavian Journal of Psychology*, 3, 247–252.
- Sloane, P. J. & Williams, H. (2000). Job satisfaction, comparison earnings and gender. *Labor*, 14, 473–502.
- Skills Focus Group (2006). Retrieved on 19 March 2011 from the Word Wide Web, available at: www.agriseta.co.za.
- Soonhee, K. (2002). *Participative management and job satisfaction: Lessons for management leadership*. University of Nevada: Las Vegas.
- SPSS (2009). *SPSS 17.0 for Windows*. Chicago, IL: SPSS Incorporated.
- Stacey, R. (1996). *Complexity and creativity in organizations*. San Francisco: Berrett-Koehler.
- Steel, R. P., & Ovalle, N. K. (1984). A review and meta-analysis of research on the relationship between behavioural intentions and employee turnover. *Journal of Applied Psychology*, 69, 673–686.

- Steelman, L. A., Levy, P. E., & Snell, A. F. (2004). The feedback environment scales (FES): Construct definition, measurement and validation. *Educational and Psychological Measurement, 64*, 165–184.
- Stotland, E., & Pendleton, M. (1989). Workload, stress, and strain among police officers. *Behavioral Medicine, 15*(1), 5–17.
- Struwig, F. W., & Stead, G. B. (2001). *Planning, designing and reporting research*. South-Africa: Maskew Miller Longman.
- Sutherland, M. M. (2004). Factors affecting the retention of knowledge workers. Unpublished research article.
- Tett, R. P. & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intentions, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*, 259–293.
- Thompson, B. M. (2005). *Work based support, emotional exhaustion, and spillover of work stress to the family environment: A study of policewomen*. Latrobe University: Melbourne, Australia.
- Ting, Y. (1996). Analysis of job satisfaction of the federal white-collar work force: Findings from the survey of federal employees. *American Review of Public Administration, 26*(4): 439–56.
- Tulgan, B. (2001). *Winning the talent war*. New York: Norton & Company.
- Turner, A. N., & Lawrence, P. R. (1965). *Industrial jobs and the worker: An investigation of response to task attributes*. Harvard University: Boston.
- Viswesvaran, C. Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54*, 314–334.
- Vondracek, F. W. (2001). The developmental perspective in vocational psychology. *Journal of Vocational Behavior, 59*, 252–261.
- Voydanoff, P. (2002). Linkages between the work-family interface and work, family, and individual outcomes: An integrative model. *Journal of Family Issues, 23*, 138–164.
- Watkins, M. L. (2001). Industrial Psychology: An identity crises and future direction. *South African Journal of Industrial Psychology, 27*(4), 8–13.
- Yin, J. T., & Yang, K. A. (2002). Nursing turnover in Taiwan: A meta-analysis of related factors. *International Journal of Nursing, 39*(6), 573–581.
- Zeichner, K., & Gore, J. (1990). Teacher socialization. In W. R. Houston (Eds.), *Handbook of research on teacher education* (pp. 320–348). New York: Macmillan.

CHAPTER 2

RESEARCH ARTICLE

Investigating the influence of manager behaviour on the turnover intentions of employees in the mining industry

J. Bothma

ABSTRACT

The general objective of this study was to determine the influence of manager behaviour on the turnover intentions of employees with scarce and critical skills in the mining industry, with the ultimate aim of retaining these employees. A purposive sample was taken from C1 – D1 level employees with scarce and critical skills at a platinum mining operation. A survey was compiled to measure the relationship between manager behaviour – with specific reference to recognition, feedback, social support, communication, job satisfaction and turnover intention of employees with scarce and critical skills. All the factors proved reliable, except for feedback. Results indicated statistically significant relationships between job satisfaction, recognition, feedback, communication from the manager and supervisor support, while a lack of job satisfaction, recognition, feedback, communication from the manager and supervisor support could be used to predict turnover intentions of employees with scarce and critical skills. The moderating effect of supervisor social support between levels of recognition and turnover intention was supported.

OPSOMMING

Die algemene doelwit van hierdie studie is om die invloed van bestuursgedrag op werkers, met skaars en kritieke vaardighede in die mynbou industrie, se voorneme om te bedank, te bepaal. Doelgerigte steekproef is geneem uit vlakke C1 – D1-werknemers met skaars en kritieke vaardighede byn platinum mynbou-onderneming. 'n Vraelys is ontwikkel om die verhouding tussen die gedrag van bestuurders – met 'n spesifieke fokus op erkenning, terugvoer, toesighouerondersteuning, kommunikasie van die bestuurder, asook werkstevredenheid – en die werkers met skaars en kritieke vaardighede se voorneme om te bedank, te meet. Al die faktore was betroubaar, met die uitsondering van Terugvoer. Resultate het aangedui dat daar statisties

betekenisvolle verskille voorgekom het tussen werkstevredenheid, erkenning, terugvoer, kommunikasie van die bestuurder en toesighouerondersteuning, terwyl 'n gebrek aan werkstevredenheid, erkenning, terugvoer, kommunikasie van die bestuurder en toesighouerondersteuning aangewend kon word om die werkers met skaars en kritieke vaardighede se voorneme om te bedank, te bepaal. Die modererende effek tussen erkenning en die voorneme om te bedank is ondersteun.

Keywords: Manager behaviour, interactional justice, feedback, recognition, job satisfaction, social support, turnover intention, scarce and critical skills.

The mining industry is currently experiencing pressure with regard to retaining scarce and critical skills. This statement is supported by a Mining Survey conducted by Landelahni Business Leaders, who found that when the current recession has passed, South African mining production could be left behind (Business day, 2010). It is also stated that the skills shortage could hinder future growth as training is not on track, and the situation is deteriorating due to the fact that many skilled workers are leaving the country. Finally, it was mentioned that although South Africa produces more mining engineers than all other English-speaking countries combined, South Africa is still not producing enough skills to replace the ageing engineering and artisan population, let alone to prepare the industry for growth (Business day, 2010).

To clearly understand what is meant by *scarce and critical skills*, and in order to retain it, it is necessary to have a proper understanding of what these skills entail. Daniels (2007) defines skills as referring to both experience and qualifications. The Department of Labour and the Sectoral Education and Training Authorities (SETA's) defines scarce skills as "a scarcity of qualified and experienced people, currently or anticipated in the future, either (a) because such skilled people are not available, or (b) because they are available but do not meet employment criteria" (Foodbev SETA, 2005, p. 42). It is stated by Daniels (2007) that critical skills refer to a specific skill within an occupation. Daniels also stated that there are two groups of critical skills within the South African context. The first group is the generic skills, which includes problem solving and learning to learn; literacy, language, or numerical skills; and for example the ability to work in teams. The second group refers to occupational skills required for performance within a specific occupation (Daniels, 2007). A shortage of

occupational skills is held responsible for the problems that surface when a firm experiences restructuring of production methods (Daniels, 2007). These definitions underline the understanding of skills shortages and must be kept in mind when analyzing the nature of shortages of scarce and critical skills with the aim of reducing turnover intentions (Daniels, 2007).

Turnover intentions refer to an individual's probability of leaving an organisation at some point in the near future. Turnover intentions are seen as the immediate originator to actual turnover behaviour (Mobley, Horner, & Hollingsworth, 1978; Tett & Meyer, 1993). Employee turnover has received significant attention in organisational and industrial psychology (Campion, 1991; Cotton & Tuttle, 1986) and takes place when an individual leaves an organisation either voluntarily or involuntarily. There are many drivers of employee turnover and in an in-house survey conducted at the operation of the participating organisation it was found that the following 5 top drivers move employees to leave the organisation: (1) contributions are not valued by management; (2) inadequate recreation facilities; (3) limited career development; (4) a lack of recognition; and (5) dissatisfaction with remuneration. Cost is seen as the biggest impact of high staff turnover (Gaylard, Sutherland, & Viedge, 2005). This can be attributed to the multiple dimensions of loss in various areas in an organisation, and will subsequently be discussed.

It has been found that most organisations under-estimate the extent of turnover costs, because organisations only consider the visible, direct costs involved (Corporate Leadership Council, 1998). There are numerous factors to consider when calculating the costs associated with staff turnover. The cost of hiring and training a replacement is not the only factor to be taken into account (Gaylard, Sutherland, & Viedge, 2005). One should also evaluate the loss and lack of institutional knowledge, reduction in office morale, reduced productivity (O'Keefe, 2000), the cost associated with the loss of talent, productivity and quality shortages, and customer dissatisfaction (Corporate Leadership Council, 1998). The total cost associated with turnover should not be taken lightly, as it has been found to be as high as between 70% and 200% of the departing employee's annual salary (Michaud, 2000). Staff retention has to become an important business objective and should be worked towards to ensure effective retention strategies are developed. In order to develop such strategies, organisations need to understand the variables contributing to the retention of their employees (Gaylard et al., 2005). The importance of determining the variables contributing to turnover was also

emphasized by Maertz and Campion (1998). They also stated that it will be an effective method in reducing turnover intentions.

Most companies base their retention strategies on the view that job satisfaction and retention are closely correlated (Corporate Leadership Council, 1999). Several attempts at defining satisfaction describe it as the final state of a psychological process (Garcia-Bernal, Gargallo-Castel, Marzo-Navarro & Rivera Torres, 2005). Job satisfaction can also be seen as a multi-dimensional concept that includes a range of favourable or unfavourable feelings in terms of how employees perceive their jobs (Davis & Newstrom 1999). The Mobley, Griffeth, Hand and Meglino (1979) turnover model identifies job satisfaction as the core affective factor involved in the process, which will eventually lead to turnover. Job satisfaction has constantly been found to be negatively related to individual's decisions to terminate their employment contract (Farrel, 1983; Mathieu, Hofmann & Farr, 1993; Michaels & Spector, 1982). It was also found by Sjöberg, Hellgren and Sverke (1997) that the effects of job perceptions on turnover intention are mediated by job satisfaction. Job perceptions were found to have a direct influence on job satisfaction and an indirect effect on turnover intention through the mediation of job satisfaction. Pienaar, Sieberhagen and Mostert (2007), and Sloane and Williams (2000), reflected that job satisfaction is influenced by numerous job-related factors, such as pay, benefits, conditions of employment, relationships with supervisors and colleagues and fundamental benefits individuals perceive themselves as receiving from doing the job.

Leading theorists have emphasised the significance of the fulfilment of different needs of employees, which will determine their behaviour in organisations (Martin & Roodt, 2008). Although previous studies found that job satisfaction is a significant predictor of the individual's intention to leave the organisation, this intention may be affected when the individual feels they receive support from their supervisor or manager (Brough & Frame, 2004; Eisenberger, Stinglahamber, Vandenberghe, Sucharski, & Rhoades, 2002). This is consistent with the findings of Doughty, May, Butell and Tong (2002), who found that factors contributing to job satisfaction included supervisor support and autonomy in nurses' place of work. A direct association has been identified between social support and job satisfaction, absenteeism, and turnover. The influence of supervisor support in this regard has received some particular recent attention (Brough & Frame, 2004).

Social support can originate from a variety of sources, such as work colleagues, supervisor(s), family and friends (Brough & Frame, 2004). McIntosh (1991) defined social support as the perceived or actual resources available to one individual from another, which supports the first individual in dealing with stress or improving their wellbeing. Manager support is the specific source of social support which will be focused on in this study, because the mining industry is still perceived to be very hierarchical, with clear reporting structures and highly influential managers at the top level. The preceding statement is based on what was observed at this operation during the period when research was conducted there. The company also did an internal survey which found that employees feel that there is a barrier between management at the top levels and employees at operational levels. Employees indicated that decisions are made at the top of the hierarchical structure and then get's rolled down to lower levels. Bliese and Britt (2001) stated that perceptions of company leadership are an aspect of social reality that is important to group members; the reason being that the quality of company leadership has a direct impact on almost every aspect of the work environment.

When applying the afore-mentioned to the mining industry, one will notice that there are different business areas within each mining group, and although the organisation as a whole may have one vision and aligned objectives, the leadership in each operational unit still has a unique approach which heavily influences the workload of employees. Some managers protect their business area from additional duties, while others volunteer their business units for additional duties and application of new interventions. It is for this reason that support from the manager is a key variable in understanding the relationship between the relevant organisational variables and turnover intention, as the manager is actively involved in the employee's day to day work activities in the mining industry. Davidmann (1998) found that a lack of support can result in frustration, job strain and burnout, which will cause lower levels of job satisfaction, and ultimately lead to higher levels of turnover. Brough and Frame (2004) also support this by showing that supervisor/manager support is negatively associated with turnover. The Financial Executive (2005) stated that communication from the manager forms an integral part of manager support, as communication from the manager has been found to limit turnover intention of employees. Communication from the manager forms part of the interactional justice variable, and of this study. Nystedt, Sjöberg and Hagglund (1996), emphasize the view of a supporting workgroup climate characterized by cooperation and friendliness as positively related to job satisfaction.

Interactional justice is defined as the interpersonal treatment people receive as procedures are implemented (Bies & Moag, 1986), and it is promoted when decision makers treat people with sensitivity and respect and explain the rationale for decisions carefully (Colquitt, 2001). A further development of an interactional justice measure by Bies and Moag (1986) included items that tap into sincerity and explanation factors, and items asking whether supervisors were able to control personal biases and considered employees' viewpoints. Colquitt (2001) also indicated that interactional justice consists of two constructs, namely interpersonal justice and informational justice (DeConinck & Johnson, 2009). Interpersonal justice refers to respect and propriety, and informational justice focuses on truthfulness and justification (DeConinck & Johnson, 2009). For the purpose of this study, the focus will specifically be on open and honest communication from the top levels in Management, down to the front-line supervisor. The aim of this is to determine whether there is a relationship between communication from the manager and the turnover intention of employees.

DeConinck and Johnson (2009) stated that organisational justice, of which interactional justice forms part, and its relationship with turnover, has not yet been analysed sufficiently. Prior research has shown that the relationship between organisational justice, which includes interactional justice, and turnover, is mediated by other variables such as turnover intentions (Aquino, Griffeth & Hom 1997; Jones & Skarlicki 2003), job satisfaction (DeConinck & Bachmann 2005), and organisational commitment (Colquitt, 2001; Konovsky, 1989). It was found by DeCremer and Mercken (2006) that interactional justice was a forerunner to support from the supervisor.

From the above it becomes clear that interactional justice has various aspects to focus on. For the purpose of this study one will focus more intensively on effective communication from the managers downwards to employees to determine whether it could have an influence on employees terminating their contract of employment with the organisation. Soonhee (2002) emphasized that effective communication between supervisor/manager and employee plays an important role in informing employees of the objectives, job expectations and organisational structures. The focus will also fall on feedback and recognition, as it forms an integral part of effective communication and is vital to this study, due to the fact that retention strategies will have to be put in place, and feedback and recognition can form part of the formalising of effective action plans.

Feedback is defined as the degree to which the employee receives clear information about his or her performance from supervisors or from co-workers (Hackman & Oldham, 1975). It was found (Hackman & Oldham, 1975; Lam, Yik, & Schaubroeck, 2002) that providing feedback to employees plays an important role in improving and maintaining employee motivation and satisfaction. Martin and Roodt (2008) found that feedback and job satisfaction were positively related. In the past, the formal performance appraisal review was seen as the ideal platform for supervisors to provide feedback to employees about how they perceived the employee's performance (Murphy & Cleveland, 1995). It was, however, found that the performance appraisal review is not a solution to employee motivation and satisfaction (Anseel & Levens, 2007). These authors also found that employees felt that feedback in performance appraisals was not leading to improvement of employee motivation and performance, and was also experienced as an unsuccessful communication method to improve the manager/subordinate relationship.

Hellgren et al. (1997) stated that the extent to which management provides relevant feedback on quality of performance and sufficient resources for role fulfilment leads to jobs being characterized by a high degree of autonomy and opportunities for personal growth. They also found that feedback positively relates to job satisfaction; therefore suggesting that satisfaction increases with the amount and quality of feedback provided by management. Nystedt, Sjöberg and Hägglund (1996) found that if the work group climate was perceived as supportive and characterized by cooperation and friendliness, it correlated positively with job satisfaction. London and Smither (2002) stated that the emphasis should be on the development of an organisational culture that is supportive of feedback processes in order to increase employee motivation and satisfaction.

Anseel and Levens (2007) extended previous research by indicating the positive long-term result of the feedback environment on job satisfaction and by indicating that the quality of leader-member exchange fully mediated the relationship between the supervisor feedback environment and job satisfaction. These results are very interesting because the study suggested that one of the psychological mechanisms through which the feedback environment influences work outcome variables is the quality of leader-member exchange. An employee's perception of his/her supervisor's or manager's feedback environment related strongly to the quality of the relation with his/her supervisor or manager, which in turn was related to job satisfaction (Anseel & Levens, 2007). This is very relevant to the current study

as it supports the hypothesis that support and feedback from the manager will lead to lower turnover intentions of employees. This will also make the argument stronger when making suggestions as to how the relationship between the employee and the supervisor can be improved, by providing specific suggestions relating to the management of feedback and recognition.

As noted previously, the manager plays a significant role in employees' satisfaction and commitment, which can be improved by providing feedback and recognition (Kreisman, 2002). Employee motivation management, with specific reference to recognition, is quite an important issue related to high performance. In a recent study (Udechukwu, Harrington, Manyak, Segal, & Graham, 2007), recognition was referred to as acknowledging the efforts of employees and compensating them adequately for these efforts, or for work well done. These authors also distinguished between formal, informal, or everyday recognition. Herzberg, Mausnek and Snydebman (1959) defined recognition as an intrinsic factor which motivates employees to a higher extent than salaries, working conditions and job security (extrinsic rewards). Intrinsic reward is defined by the Business Dictionary (2010) as an outcome that gives an individual internal, personal satisfaction from a job well done, while an extrinsic reward refers to a known-reward which an employee receives but does not lead to his or her greater satisfaction (Business Dictionary, 2010). The intrinsic reward factor of recognition was ranked as the second most important motivating factor, compared to pay, for public sector managers (Khojasteh, 1993). For the purpose of this study, recognition will be defined as a form of acknowledgment an employee receives from their manager for work well done. It has been found that employees' perceptions of inadequate recognition contribute to turnover (Hendrie, 2004). Whitmore and Moss (2009) found that recognition correlates positively with work engagement, especially if performance orientation was high. Overall, there is limited research available on recognition in relation to turnover intention, which creates a gap and opportunity for research to be done. This study will contribute to research on recognition and turnover intention of employees as it is a critical and relevant variable for this study, and a new scale for its measurement will be devised. For the organisation struggling to retain scarce and critical skills of specific employees, the findings may also present an avenue for intervention in managing these employees' turnover intentions.

METHOD

Participants and procedure

A purposive sample ($n = 505$) was taken from employees with scarce and critical skills at a Platinum mining operation in the North West Province. The questionnaire was distributed amongst employees who work in the mining and engineering departments with scarce and critical skills, between the job levels of C1 – D1. Examples of these occupations include shift supervisors, miners and artisans. The total population of these occupations at this mining operation at the time of the survey was 505 employees (Response rate = 49,5%). A measuring battery was developed and a proposal on the study was presented to the HR manager for approval. Sessions at respective shafts were arranged to distribute the questionnaire. A letter providing the background and ethical considerations regarding the study were included in the questionnaire. Employees were given the opportunity in the arranged sessions to complete the survey. Table 1 below gives an indication of the characteristics of the participants in this study.

Table 1

Biographical Characteristics of the Participants (n = 250)

Item	Category	Frequency	Percentage
Gender	Male	213	85,20
	Female	37	14,80
Union member	Yes	219	87,60
	No	29	11,60
Language	Afrikaans	146	58,40
	English	8	3,20
	Sepedi	8	3,20
	Sesotho	9	3,60
	Setswana	57	22,80
	isiSwati	4	1,60
	Tshivenda	3	1,20
	Ndebele	0	0
	isiXhosa	6	2,40
	isiZulu	5	2,00
	isiTsonga	2	,80
Household situation	Other	2	,80
	Single	40	16,00
	Married or living with a partner	165	66,00
	Living with parents	23	9,20
	Divorced	10	4,00
	Remarried	12	4,80

Education level	Grade 10	43	17,20
	Grade 11	17	6,80
	Grade 12	117	46,80
	Technical College Diploma	46	18,40
	Technikon Diploma	13	5,20
	University Degree	11	4,40
	Postgraduate Degree	2	0,80

Table 1 indicates that 85,2% of the participants were male, and females only had 14,8% representation. It was found that 87,6% of the participants belonged to a union. The two languages best represented were Afrikaans (58,4%) and Setswana (22,8%). It was found that 66% of the participants were married or living with a partner. Of the total sample, 46,8% of participants had at least a grade 12 qualification, and 28,8% held some form of post-secondary qualification.

Measuring Battery

The following instruments were used in the empirical study:

Communication with manager. This scale is based on Colquitt (2001) and measures the degree to which the supervisor employs clear and open communication in relation to the employee (e.g. “*My manager has open communication with me*”). A high score indicates clear and ample communication, and the response alternatives range from 1 (disagree) to 5 (agree). The reported Cronbach alpha coefficient for this scale is 0,92 (Colquitt, 2001). It is measured with 5 items.

Feedback. Feedback is defined as the degree to which the employee receives clear information about his or her performance from supervisors (Hackman & Oldham, 1975). The response alternatives ranged from 1 (disagree) to 5 (agree), where a high score indicates that the supervisor gives feedback. “*I usually know whether or not my work is satisfactory on this job*” presents a typical item. The reported Cronbach alpha coefficient for this scale is 0,75 (Hackman & Oldham, 1975).

Recognition. Items were developed to measure the degree of recognition employees receive from supervisors. . This measure aims to capture whether respondents receive recognition from their respective supervisors on how they have carried out their work (e.g. “*I regularly receive recognition for work well done*”). The response alternatives range from 1 (disagree)

to 5 (agree), where a high score indicates that the supervisor gives recognition. Items were tested for face validity with the academic supervisor, and finally it was decided to measure this construct with 5 items. Determining the reliability of this measure presents a unique contribution of the current investigation.

Job satisfaction. Job satisfaction was measured with a scale developed by Hellgren, Sjöberg and Sverke (1997), based on the work of Brayfield and Rothe (1951). This scale consists of three items, measuring satisfaction with the job (e.g. *“I enjoy being at my job”*). The response alternatives range from 1 (disagree) to 5 (agree), where a high score reflects satisfaction with the job. The reported Cronbach alpha coefficient for this scale is 0,86 (Hellgren et al., 1997).

Supervisor social support. Social support was measured with a scale developed by Caplan et al. (1975) and consists of three items, e.g. *“I always receive help from my manager when difficulties in my work arise”*. The response scale ranges from 1 (disagree) to 5 (agree), where a higher score on the scale reflects a larger sense that support is available. Caplan et al. (1975) reported satisfactory reliability with a Cronbach alpha coefficient of this scale ranging from 0,73 to 0,83.

Turnover intention. This scale, consisting of three items, was developed by Sjöberg and Sverke (2000) and measures the strength of the respondent’s intention to leave their present position (e.g. *“I feel that I could leave this job”*). The response alternatives range from 1 (disagree) to 5 (agree), and a high score reflects a strong intention to leave the job. The reported Cronbach alpha coefficient for this scale is 0,83 (Sjöberg & Sverke, 2000).

Statistical Analysis

The statistical analysis was carried out with the help of the SPSS-program (SPSS, 2009). The program was used to carry out statistical analysis regarding the reliability and validity of the measuring instruments and descriptive statistics. Cronbach alpha coefficients were used to assess the reliability and validity of the measuring instruments (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) and inferential statistics were used to analyse the data. A cut-off point of 0,30 (medium effect) (Cohen, 1988) was set for the practical significance of correlation coefficients. Regression analysis was used to determine whether recognition, feedback, communication from the manager, job

satisfaction and support from the supervisor will predict turnover intention. Interaction effects of supervisor support with the independent variables of interest were also investigated by creating interaction terms (Aiken & West, 1991), and where effects were evidenced they were plotted to enhance understanding.

RESULTS

Table 2 below provides the descriptive statistics of the measuring instruments.

Table 2

Descriptive Statistics and Alpha Coefficients of the Measuring Instruments

Item	Mean	SD	Skewness	Kurtosis	α
Recognition	3,64	0,91	0,56	0,03	0,69
Feedback	3,72	0,84	0,41	0,31	0,52
Communication with manager	3,40	1,06	0,50	0,35	0,91
Job satisfaction	3,68	0,99	0,41	0,65	0,84
Turnover intention	2,67	1,23	0,24	0,98	0,76
Supervisor social support	3,46	1,11	0,56	0,47	0,81

Inspection of Table 2 reveals that acceptable Cronbach alpha coefficients were obtained for the majority of the scales, indicating acceptable levels of internal consistency. All the alpha coefficients were higher than the guideline of $\alpha > 0,70$ (Clark & Watson, 1995), except for the Feedback scale which has a lower alpha coefficient, and Recognition which is just below the indicated guideline. Considering the exploratory nature of the study and the fact that there is not much literature available to aid our understanding of retention of scarce skills in the mining industry, the Feedback variable is retained, but other results related to it should be interpreted with caution (Mansourian, 2008). All scales had a normal distribution, as indicated by their skewness and kurtosis. The Recognition scale developed for this study showed reasonable reliability, with an alpha coefficient of 0,69.

Table 3 below reports on the relationships between the variables of interest.

Table 3

Correlations between the Variables

Item	1	2	3	4	5
1. Recognition					
2. Feedback	0,70**				
3. Communication with manager	0,76**	0,63**			
4. Job satisfaction	0,69**	0,65**	0,64**		
5. Turnover intention	-0,52**	-0,36**	-0,50**	-0,53**	
6. Supervisor social support	0,66**	0,63**	0,83**	0,57**	-0,44**

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0,01 level (2-tailed)

$r \geq 0,50$ = large effect

$r \geq 0,30$ = medium effect

Table 3 indicates that recognition had a practically significant correlation with feedback, communication with the manager, job satisfaction and supervisor social support, all with large effect. Recognition also showed a statistically significant negative correlation with turnover intention (practically significant, large effect). Feedback showed practically and statistically significant correlations with communication with the manager, job satisfaction and supervisor social support, all with large effect. Feedback was also statistically significantly negatively related to turnover intention (medium effect). Communication with the manager showed practically significant positive correlations with job satisfaction and supervisor social support (large effects). Communication with manager was also statistically significantly negatively related to turnover intention (practically significant, large effect). Job satisfaction is negatively related to turnover intention, and positively to supervisor social support (practically significant, large effects). Supervisor social support showed a practically significantly negative correlation with turnover intention (medium effect).

Table 4 presents the results of the regression analysis with turnover intention as the dependent variable and the independent variables of feedback, communication with manager, job satisfaction and supervisor support. The table also indicates the testing of the moderating effect of social support.

Table 4

Multiple Regression Analysis with Turnover Intention as Dependent Variable

Model		Unstandardized Coefficients		Standardised Coefficients	T	p	F	R	R ²	ΔR^2
		B	SE	Beta						
1	(Constant)	5,34	0,30		17,64	0,00	33,13	0,59 ^a	0,35	0,35
	Recognition	-0,33	0,12	-0,25	-2,70	0,01*				
	Feedback	0,24	0,11	,016	2,14	0,03*				
	Communication with manager	-0,24	0,01	-,021	-2,49	0,01*				
	Job satisfaction	-0,42	0,01	-,034	-4,41	0,00*				
2	(Constant)	5,34	0,30		17,63	0,00	26,59	0,60 ^b	0,35	0,00
	Recognition	-0,33	0,12	-0,25	-2,72	0,01*				
	Feedback	0,26	0,12	0,18	2,26	0,03*				
	Communication with manager	-0,18	0,12	-0,15	-1,42	0,16				
	Job satisfaction	-0,42	0,10	-0,34	-4,41	0,00*				
3	Supervisor social support	-0,08	0,11	-0,07	-,78	0,44	15,85	0,61 ^c	0,37	0,02
	(Constant)	2,21	01,3		1,70	0,09				
	Recognition	-0,22	0,13	-0,16	-1,68	0,09				
	Feedback	0,23	0,30	0,15	,75	0,46				
	Communication with manager	0,28	0,28	0,24	1,00	0,32				
	Job satisfaction	-0,01	0,26	-0,01	-,04	0,97				
	Supervisor social support	-0,11	0,11	-0,10	-1,07	0,29				
	Recognition_Supervisor support	0,20	0,09	0,19	2,12	0,04*				
	Feedback_Supervisor support	0,01	0,09	0,03	,14	0,89				
	Communication_Supervisor support	-0,14	0,08	-0,39	-1,70	0,09				
Job satisfaction_Supervisor support	-0,14	0,08	-0,37	-1,61	0,11					

The entry of recognition, feedback, communication with manager and job satisfaction in the first step of the regression analysis produced a statistically significant model ($F = 33,13$; $p = 0,00$) accounting for approximately 35% of the variance. In the first step, it appears that recognition ($\beta = -0,25$; $t = -2,7$; $p \leq 0,05$), feedback ($\beta = -0,16$; $t = 2,14$; $p \leq 0,05$), communication with manager ($\beta = -0,21$; $t = -2,5$; $p \leq 0,05$) and job satisfaction ($\beta = -0,34$; $t = -4,4$; $p \leq 0,05$) all make statistically significant contributions to predicting turnover intention. When support from the supervisor was entered in the second step of the regression analysis, a statistically significant model was produced ($F = 26,6$; $p = 0,00$), still accounting

for approximately 35% of the variance. However, social support from the supervisor is not statistically significant in predicting turnover intentions. Instead, it is seen that recognition, feedback and job satisfaction make statistically significant contributions in predicting turnover intentions. In the third and final model, 37% of the variance is explained by adding the interaction terms of supervisor social support with the other independent variables. The interaction of recognition with supervisor social support proves to be the only statistically significant predictor of turnover intentions. To graphically illustrate this relationship, please consult the graph below:

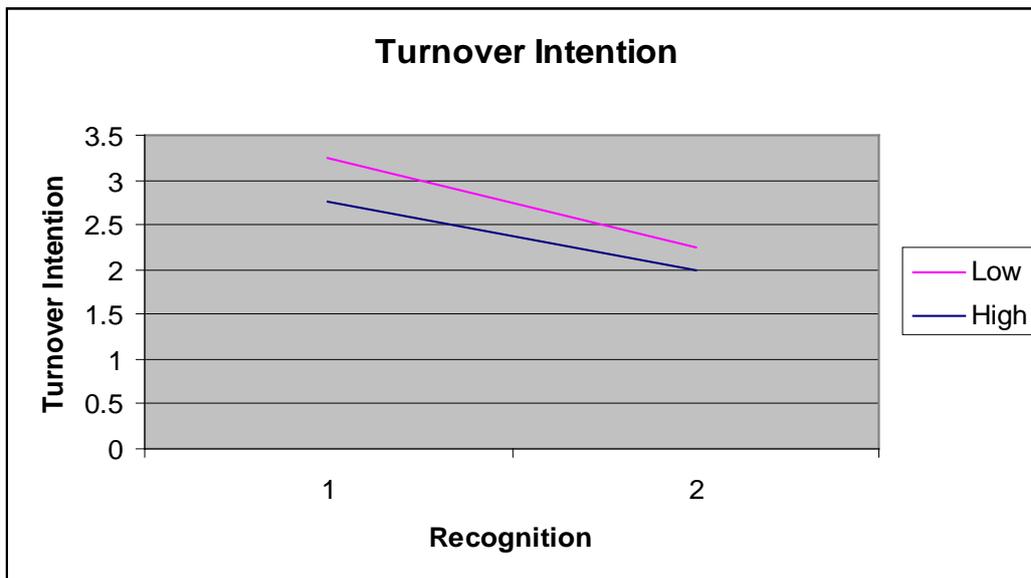


Figure 1. The moderating effect of supervisor social support between levels of recognition and turnover intention

Figure 1 above reveals that, at low levels of recognition, individuals with low levels of supervisor social support show higher levels of turnover intention. However, when one moves to high levels of recognition, there is a marked decrease in turnover intentions for both individuals high and low in supervisor social support. What is seen though, is that even when high levels of recognition are experienced, individuals with high levels of supervisor social support still score lower in terms of turnover intentions when compared with individuals with low levels of supervisor support.

DISCUSSION

It was found that most of the scales had acceptable reliability. The Feedback scale, however, had a low alpha coefficient. This may have been due to the fact that only 4 items are used to measure this scale. However, in its development (Hackman & Oldham, 1975), and in previous research (Näswall et al., 2006), this scale presented with acceptable reliability. The Recognition scale s developed for this study showed reasonable reliability. This scale will contribute to future research as limited research is available on recognition as an entity on its own, even though it is a very popular term. Recognition is usually seen as a part of motivation (Davidmann, 1998), and this scale presents a first step to enable researchers to measure it as a separate, behaviour-based variable.

In terms of the relationships between the different variables, recognition showed strong relationships with feedback regarding the job from the supervisor/manager, communication with the manager, job satisfaction and supervisor social support. The strong correlations perhaps indicate that it is not so easy to disentangle the effects of for example recognition, communication and social support. However, what is significant is that they all relate to job satisfaction, which in turn related negatively to turnover intention. When considering previous research, there are various studies supporting these findings. Firstly, Kreisman (2002) found that increased levels of recognition, feedback and job satisfaction will lead to higher levels of job satisfaction, which in turn limits turnover intention. The negative relationship between recognition and turnover intention reported here is supported by Hendrie (2004), who indicated that lower levels of recognition will lead to higher levels of turnover intention. Feedback showed a positive relationship with job satisfaction, communication with the manager, and supervisor social support, which is a replication of findings by Martin and Roodt (2008) and Nystedt, Sjöberg and Hägglund (1996), who also found that support is positively related to feedback and will increase job satisfaction. Anseel and Levens (2007) reflected that feedback is negatively related to turnover intention, confirming the finding that higher feedback levels will lead to lower turnover intention. The positive relationship between manager communication and job satisfaction is supported by Ting (1996). In a further study by The Financial Executive (2005), it was indicated that communication from the manager forms an integral part of manager support as communication from the manager relates to job satisfaction, which in turn limits turnover intention of employees. Anderson, Corazzini and McDaniel (2004) reported that ‘n lack of

accurate, effective and open communication will lead to higher levels of turnover intention. The negative relationships found here between supervisor social support and job satisfaction with turnover intention is supported by Brough and Frame (2004).

Finally, results indicated that job satisfaction, recognition, feedback, and communication with the manager could be applied to predict turnover intentions of employees with scarce and critical skills, if considered by themselves. However, the moderating effect of supervisor social support between levels of recognition and turnover intention proved to be the only statistically significant predictor of turnover intentions in the final step of the regression model. This finding highlights the importance of both recognition and supervisor social support in managing turnover intentions of employees with scarce and critical skills. An interesting finding was that even under high levels of recognition, individuals with high levels of supervisor social support still score lower in terms of turnover intentions when compared with individuals with low levels of supervisor support. Previous research supports these findings. Johnsrud and Rosser (1997) found that when employees feel they do not receive enough recognition, it will contribute to them leaving the organisation. Pienaar, Sieberhagen and Mostert (2007) indicate that social support relates strongly to job satisfaction, and Limbert (2004) finds that positive perceptions of social support in the workplace correlate strongly to improved psychological well-being and job satisfaction. Based on this the conclusion can be drawn that when social support is limited, turnover intentions will increase.

RECOMMENDATIONS

From the above discussion it becomes clear that recommendations should be made to ensure that recognition, feedback, communication from the manager and supervisor support is managed correctly to ultimately lead to higher levels of job satisfaction and lower levels of turnover intention of employees with scarce and critical skills in the mining industry. Management should focus on implementing regular and effective feedback sessions on the specific job levels included in the sample. A recommendation can be made that weekly team meetings be held to communicate expected targets for the week, during which feedback can be given on the results of the previous week's objectives. Although previous research indicated that performance appraisals are not an effective tool to improve feedback (Anseel & Levens, 2007), the suggestion could still be made to management to implement key performance areas for employees at these specific levels and to link it to their increases. This intervention should assist employees in understanding what is expected of them and also create the opportunity to management to provide employees with individual feedback regarding their performance during a performance review session. These sessions can be held quarterly due to time constraints and to also provide employees with enough time to work towards their key deliverables. Evaluation of the effectiveness of this performance management system must be done to determine whether it contributes to the overall success of the organisation.

It is also recommended that opportunities be created to provide employees with recognition when it is required or earned. An example of this is to have quarterly communication forums in which all employees are invited to receive important communication from management. During these meetings, management can reward employees for exceptional performance or for safety targets reached. These functions should not only take place for management and the specific employees who one wishes to reward; it should include the employee's colleagues and supervisors. Recognition in this regard will be acknowledging the employee in the presence of his/her colleagues. A token gift can even be exchanged. The aforementioned communication forums can also be used to improve overall effectiveness of communication from management. During these forums, employees should be afforded the opportunity to ask questions, which can be minuted, and in a case where management is unable to provide employees with an answer, feedback should be given on these specific questions in the next communication forum. What is critical to the success of these forums is

that only relevant information should be communicated and these forums should be done per business area, and not include the entire operation, to ensure that a safe environment is created in which employees would want to interact. Successful communication forums could also lead to improved two-way communication which will make employees feel they are acknowledged in decision-making processes. To ensure successful communication from management, it is recommended that a communication tool and rules manual be written with effective communication techniques and styles. This manual should be reader friendly and give practical guidelines on achieving effective communication.

The last critical focus area is support from the supervisor. This variable is supported by one value of the company which is: “we value and care about each other”. Due to the fact that the values are already active in this company and well known by all employees, the recommendation is that the values be re-emphasized and re-introduced to ensure that all supervisors support their subordinates which will assist in retaining these critical employees. The company has also implemented Personal Change Programme workshops for employees who assist with re-introducing the values as well as different communication methods to improve communication within the organisation. It is recommended that management should show support for these change interventions to improve the visibility of supervisor support.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Anderson, R. A., Corazzini, K. N., & McDaniel, R. R. Jnr. (2004). Complexity science and the dynamics of climate and communication: Reducing nursing home turnover. *Gerontologist*, 44(3), 378–388.
- Anseel, F., & Lievens, F. (2007). The long-term impact of the feedback environment on job satisfaction: A field study in a Belgian context. *Applied Psychology: An International Review*, 56(2), 254–266.
- Aquino, K., Griffeth, R. W., & Hom, P. W. (1997). Integrating justice constructs into the turnover process: A test of a referent cognitions model. *Academy of Management Journal*, 40(5), 1208–1227.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication fairness of communication, in *Research in Negotiations in Organizations*, R. J. Lewicki, B. H. Shepard, and M. H. Bazerman, (Eds.), Greenwich, CT: JAI Press, 43–55.
- Bliese, P. D., & Britt, T. W. (2001). Social support, group consensus and stressor-strain relationships: Social context matters. *Journal of Organizational Behaviour*, 22, 425–436.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307–311.
- Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: The role of social support and police organisational variables. *New Zealand Journal of Psychology*, 33(1), 8–16.
- Business Dictionary. (2010). Retrieved 6 September 2010 from the World Wide Web, available at: <http://www.businessdictionary.com>.
- Businessday South Africa (2010, 2 March). *New Mining Survey Warns of Serious Skill Shortage*. Retrieved on 13 November 2010 from the World Wide Web, available at: allafrica.com/stories/201003020677.html
- Campion, M. A. (1991). Meaning and measurement of turnover: comparison of alternative measures and recommendations for research. *Journal of Applied Psychology*, 76, 199–212.
- Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau, S. R. (1975). *Job demands and worker health: Main effects and occupational differences*. Washington, DC: Health, Education and Welfare.
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7, 309–319.

- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386–400.
- Corporate Leadership Council. (1998a). *Employee retention*. Washington, DC: Corporate Executive Board.
- Corporate Leadership Council. (1998b). *Addressing systematic drivers of dissatisfaction*. Washington, DC: Corporate Executive Board.
- Corporate Leadership Council. (1999). *Salient findings on the career decisions of high value employees*. Washington, DC: Corporate Executive Board.
- Cotton, J., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of Management Review, 11*, 55–70.
- Daniels, R. C. (2007). *Skills shortages in South Africa: A literature review*. School of Economics, University of Cape Town.
- Davidmann, M. (1998). Motivation: Summary. Retrieved on 25 August 2010 from the World Wide Web, available at: www.solhaam.org/indexes/motvtn.html.
- De Coninck, D. B., & Johnson, J. T. (2009). The effects of perceived supervisor support, perceived organizational support, and organizational justice on turnover among salespeople. *Journal of Personal Selling & Sales Management, XXIX*(4); 333–350.
- DeConinck, J., & Bachmann, D. (2005). An analysis of turnover among retail buyers. *Journal of Business Research 58*(7), 874–882.
- DeCremer, D., & Mercken, L. (2006). Perceived support as a mediator of the relationship between justice and trust. *Group & Organization Management, 31*(4), 442–468.
- Doughty, J., May, B., Butell, S., & Tong, V. (2002). Work environment: A profile of the social climate of nursing faculty in an academic setting. *Nursing Education Perspectives, 23*(4), 191–196.
- Eisenberger, R., Stinglhanber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organisational support and employee retention. *Journal of Applied Psychology, 87*, 565–573.
- Farrel, D. (1983). Exit, voice, loyalty and neglect as responses to job dissatisfaction: A multidimensional scaling study. *Academy of Management Journal, 26*, 596–607.
- Food & Beverage SETA (2005, October). *Sectoral Skills Plan: 2005-2010*. Draft Document: Food & Beverage SETA, Pretoria.
- Garcia-Bernal, J., Gargall-Castel, A., Marzo-Navarro, M., & Rivera-Torres, P. (2005). Job satisfaction: Empirical evidence of gender differences. *Women in Management Review, 20*(4), 279–288.

- Gaylard, M., Sutherland, M., & Viedge, C. (2005). *The factors perceived to influence the retention of information technology workers*. University of the Witwatersrand: Johannesburg.
- Hackman, R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170.
- Hellgren, J., Sjöberg, A., & Sverke, M. (1997). Intention to quit: Effects of job satisfaction and job perceptions. In F. Avallone, J. Arnold & K. de Witter (Eds.), *Feelings work in Europe* (pp. 415–423). Milano: Guerini.
- Hendrie, J. (2004). A review of a multiple retailer's labour turnover. *International Journal of Retail & Distribution Management*, 32, 434–441.
- Herzberg, F., Mausnek, B., & Snydebman, B. (1959). *The Motivation to Work* (Second Edition). New York: John Wiley and Sons.
- Johnsrud, L. K., & Rosser, V. J. (1997). Administrative staff turnover: Predicting the intentions of stayers and leavers. University of Hawaii: Mānao.
- Jones, D. A., & Skarlicki, D. P. (2003). The Relationship between perceptions of fairness and voluntary turnover among retail employees. *Journal of Applied Social Psychology*, 33(6), 1226–1243.
- Khojasteh, M. (1993). Motivating the private vs public sector managers. *Public Personnel Management*, 22(3), 397.
- Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32(1), 115–130.
- Kreisman, J. B. (2002). Insight into employee motivation, commitment and retention. *Business Training Experts: Leadership Journal*, 1-24.
- Lam, S. S. K., Yik, M. S. M., & Schaubroeck, J. (2002). Responses to formal performance appraisal feedback: The role of negative affectivity. *Journal of Applied Psychology*, 87, 192–201.
- Limbert, C. (2004). Psychological well-being and job satisfaction amongst military personnel on unaccompanied tours: The impact of perceived social support and coping strategies. *Military Psychology*, 16(1), 37–51.
- London, M., & Smither, J. W. (2002). Feedback orientation, feedback culture, and the longitudinal performance management process. *Human Resource Management Review*, 12, 81–100.
- Maertz, C. P., & Campion, M. A. (1998). 25 years of voluntary turnover research: A review and critique. *International Review of Industrial and Organisational Psychology*, 13, 49– 81.

- Mansourian, Y. (2008). Exploratory nature of, and uncertainty tolerance in, qualitative research. *New Library World*, 109(5/6); 273–286.
- Martin, A., & Roodt, G. (2008). Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, 34(1), 23–31.
- Mathieu, J. E., Hofmann, D. A., & Farr, J. L. (1993). Job perceptions-job satisfaction relations: An empirical comparison of three competing theories. *Organizational Behavior and Human Decision Processes*, 56, 370–387.
- McIntosh, N. J. (1991). Identification and investigation of properties of social support. *Journal of Organizational Behavior*, 12, 201–217.
- Michaels C. E., & Spector P. E. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand and Meglino model. *Journal of Applied Psychology*, 67, 53–59.
- Michaud, L. (2000). The value of retaining employees. *Agency Sales Magazine*, 30(11), 25–27.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology*, 63(4), 408–414.
- Mobley, W. H., Griffeth, R.W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 36(3), 493–521.
- Murphy, K. R., & Cleveland, J. N. (1995). *Understanding performance appraisal*. Thousand Oaks, CA: Sage.
- Näswall, K., Baraldi, S., Richter, A., Hellgren, J., & Sverke, M. (2006). *The salaried employee in the modern working life: Threats and challenges. Technical report on the sample, data collection, and measurement properties of the instruments*. Stockholm, Sweden: SALTSA.
- Nystedt, L., Sjöberg, A., & Hägglund, G. (1995). Discriminant validation of measures of job involvement, job satisfaction and organizational commitment in a military setting. Stockholm University: Stockholm.
- O’Keefe, T. (2000). Lost employee costs more than just a paycheck. Retrieved on 15 June 2010 from the World Wide Web, available at; <http://www.amcity.com/atlanta>.
- Pienaar, J., Sieberhagen, C. F., & Mostert, K. (2007). Investigating turnover intentions by role overload, job satisfaction and social support moderation. *SA Journal of Industrial Psychology*, 33(2), 62–67.

- Sjöberg, A., & Sverke, M. (2000). The interactive effect of job involvement and organizational commitment on job turnover revisited: A note on the mediating role of turnover intention. *Scandinavian Journal of Psychology, 3*, 247–252.
- Sloane, P. J., & Williams, H. (2000). Job satisfaction, comparison earnings and gender. *Labor, 14*, 473–502.
- Soonhee, K. (2002). Participative management and job satisfaction: lessons for management leadership. University of Nevada: Las Vegas.
- SPSS (2009). *SPSS 17.0 for Windows*. Chicago, IL: SPSS Incorporated.
- The Financial Executive (2005, April) retrieved on 2 October 2010 on the World Wide Web, available at, www.thefreelibrary.com
- Ting, Y. (1996). Analysis of job satisfaction of the federal white-collar work force: findings from the survey of federal employees. *American Review of Public Administration, 26*(4): 439–56.
- Udechukwu, I., Harrington, W., Manyak, T., Segal, S., & Graham, S. (2007). The Georgia department of corrections: an exploratory reflection on correctional officer turnover and its correlates. *Public Personnel Management, 36*(3): 247–265.
- Whitford, T., & Moss, S. A (2009). Moderating role of follower regulatory focus on goal orientation transformational leadership in distributed work groups. *Communication Research, 36*, 810.

CHAPTER 3

Conclusions, limitations and recommendations

This chapter comprises conclusions regarding the literature review and the empirical study, in accordance with the specific objectives. The limitations of the research are discussed, followed by recommendations for the organisation. Lastly, suggestions are made for future research.

3.1 Conclusions

Conclusions are reached based on the specific objectives set for this study. The first objective was to determine the relationship between manager behaviour (interactional justice [which is here referred to as communication from the manager], feedback and recognition), social support, job satisfaction, and turnover intention of employees according to the literature.

A literature study was conducted to determine the relationship between the aforementioned variables. The literature study confirmed that there is a positive relationship between communication from the manager, recognition, feedback, supervisor support and job satisfaction. Ting (1996) stated that communication from the manager leads to increased levels of job satisfaction. It was also found by Anderson, Corazzini and McDaniel (2004) that open, accurate and regular communication will lead to lower staff turnover rates. House and Wigdor (1967) indicated that when employees receive regular feedback, it will lead to higher levels of job satisfaction.

In a study conducted by Anseel and Lievens (2007), feedback related strongly to the quality of the relationship the employee has with his/her supervisor, which will in turn lead to higher levels of job satisfaction and lower levels of turnover intention. The literature study indicated that there is a positive relationship between supervisor support and job satisfaction (Brough & Frame, 2004; Eisenberger, Stinglahamber, Vandenberghe, Sucharski & Rhoades, 2002). It was also found that the greater the levels of job satisfaction, the lower the possibility of turnover intentions (Martin & Roodt, 2008). Based on the above, it is clear that the literature stipulates that there is a positive relationship between the variables studied. The lack of

communication from the manager, recognition, feedback, and social support is associated with turnover intention.

The second objective was to determine what the relationship is between manager behaviour (interactional justice/communication from the manager, feedback and recognition), social support, job satisfaction and turnover of employees with scarce and critical skills in the specific mining organisation that participated in this research.

The relationships were measured and determined. The findings were also compared to previous research, which supported the findings of this study. Results indicated that recognition had a positive relationship with feedback, communication with the manager, supervisor social support and job satisfaction. These variables in turn related negatively with turnover intention.

The third objective was to determine whether manager behaviour, social support, and job satisfaction can be applied to predict the turnover intention of employees with scarce and critical skills within the mining industry. Results indicated that job satisfaction, recognition, feedback, communication with the manager and supervisor social support could be applied to predict turnover intentions of employees with scarce and critical skills. This means that when employees experience low levels of recognition, of feedback, of communication with the manager and of supervisor social support, turnover intention will increase.

The fourth objective was to determine whether social support moderates the relationship of manager behaviour and job satisfaction with turnover intention.

Results indicated that social support does moderate the relationship of manager behaviour and job satisfaction with turnover intention. The moderating effect of supervisor social support between levels of recognition and turnover intention showed that low levels of supervisor social support and recognition will lead to higher levels of turnover intention. It was, however, also found that individuals with high levels of recognition and with high levels of supervisor social support still score lower in terms of turnover intentions, when compared with individuals with low levels of supervisor support. Social support therefore does moderate the relationship between manager behaviour and job satisfaction with turnover intention.

The fifth objective was to develop recommendations that can be made to management to enable retention of employees with scarce and critical skills. This objective will be addressed lastly in this chapter. Subsequently the limitations of the study are noted.

3.2 Limitations

A range of limitations have been identified and should be noted. Firstly, the measuring battery used to measure recognition was self developed with the assistance of the supervisor. Although the recognition scale showed a reasonable reliability with an alpha coefficient of 0.69, it is recommended that further research be undertaken to offer a more precise measure. The feedback scale was the one which had a significantly low alpha coefficient when compared with the other scales. It is recommended that additional items be developed to increase the reliability of the feedback scale. The surprising element of this scale is that it showed good reliability in previous international research, but in this study it had an alpha coefficient which emphasizes the need to revise the items of the current scale. The communication and supervisor social support scales are recommended for future research due to the high reliability found in this study.

The second limitation is the inadequate representation of females in the target group used in this study. The reason could be attributed to the fact that the mining industry is still in the process of transformation to increased female representation in scarce and critical positions. In this sample of 250, only 14.8% of participants were female. This is seen as a limitation, since the drive towards retaining females is seen as top priority in the mining industry. This study might therefore not provide a clear picture on females' intention to leave the company.

The third limitation is based on the measuring scales which only consisted out of 4 or 5 items. This raises the question of how valid the measuring instruments were in this study. Although all scales proved to be reliable, it is still suggested that more items should be included in the different scales.

The job satisfaction levels experienced by employees with scarce and critical skills working at this specific operation is the fourth limitation of this study and is also an objective which

management was very interested in determining. Due to the fact that this is a cross-sectional study, one is not able to determine all the elements that will lead to turnover intention at this operation. The nature of this study is to provide information regarding the relationships between the different variables, and as such it was seen that high levels of recognition, feedback, communication with the manager and supervisor social support are associated with high levels of job satisfaction. It is therefore still not clear whether employees at this specific operation are satisfied with their jobs, compared with other organisations or sectors in South Africa.

3.3 Recommendations

Recommendations flowing from the research findings are made for the organisation as well as for future research:

3.3.1 Recommendations for the participating organisation

From this study one is able to make the conclusion that there is a positive relationship between communication from the manager, recognition, feedback, social support and job satisfaction. To assist with improving the afore-mentioned in this mining organisation the following recommendations are made:

Managers have to make more time available for employees (Anseel & Levens, 2007), by focusing on teambuilding sessions for natural working teams. It is therefore smaller groups which are easier to manage when compared with an entire business area with approximately 3 500 employees per. An excellent example of this is the Personal Change Workshops which is currently running at this operation, but these workshops should only be seen as the beginning of change. It is therefore recommended that these types of initiatives be on-going. When employees are provided with more than one opportunity to attend workshops, it will also assist in making them positive about attending these workshops because it will then not be seen as just another one-time training course which will result in limited change. Workshops employees have to attend should be opened and closed by management which increases the visibility of management. During morning meetings, some actions might be put

in place to improve concerns that were raised in these workshops. This will assist in sustaining good relationships.

Managers have to increase their knowledge of actual performance (Anseel & Levens, 2007) through regular visits to different teams and do on the job coaching at the workplace to see whether employees are coping with their work deliverables. Once again, employees will feel that management is interested in their work. It happens that performance-related problems are identified too late, since the impact of poor performance is usually seen after a period and not immediately. These visits will assist management in increasing their knowledge of actual performance.

Employees need to have a better understanding of performance expectations, and feedback on performance should be an on-going process (Anseel & Levens, 2007). Employees should be included in the communication of the company strategy. Communicate to employees what the company is working towards achieving and how it affects them. It was found by Lotz and Donalds (2004) that communication road shows helped to influence employees' perceptions towards a common norm. Progress on objectives achieved should also be communicated throughout the year. This will assist employees in understanding how they fit into the bigger picture - where they are in this drive towards achieving specific objectives and what the impact is if these specific employees did not deliver on their objectives. The recommendation is that company strategy not only be discussed at management levels. One company objective can be discussed with employees every week during morning meetings to increase levels of understanding of what is expected of them when management requests them to perform. They can also determine how they are going to deliver on these objectives by identifying obstacles in which they need management support and by reporting it to management. This will improve overall two-way communication and it will place management in the position in which they have to provide feedback because employees will now be more informed.

Managers must not dwell on the negatives – these can be limited by providing recognition (Anseel & Levens, 2007). The recommendation is that management create opportunities for recognizing employee achievements. Sensing others' appreciation can make endeavors feel worthwhile and unlock creative channels in previously unrecognized directions (Lutgen-Sandvik, Riforgiate & Fletcher, 2011). In the previous chapter it was recommended that smaller functions should be held in which individuals are recognised in the presence of their

colleagues. The success factor is to ensure that these types of functions are not only for management and high performers but for members of staff. This will also motivate employees who are not receiving awards to perform because current quarterly functions do not cater for all.

The above listed suggestions indicate that supervisors could adopt a number of specific behaviours such as providing recognition, feedback and effective communication with employees to support their own knowledge concerning their performance, recognition and communication processes in the organisation. This could result in an improved manager/subordinate relationship and higher levels of employee satisfaction, and could ultimately lead to lower levels of turnover (Anseel & Levens, 2007).

To ensure this study adds value to the organisation, it is recommended that this dataset be compared with other datasets from previous research to determine job satisfaction levels experienced by employees with scarce and critical skills, these datasets are available. Currently there is a drive at this specific operation to change the working environment to a pleasant working environment where employees would want to work. If the job satisfaction levels can be established, this will assist with action plans to ensure that employees with scarce and critical skills are retained. The future recommendation is to not make use of a cross-sectional study again at this operation, but to rather establish the aspects that will lead to higher levels of job satisfaction and not necessarily determine the relationships between different variables.

3.3.2 Recommendations for future research

Research has proved that South Africa is losing many skilled workers to other countries, which confirms that there is a major need to retain scarce and critical skills in the mining industry (Business day, 2010). This is the first recommendation for future research. It is therefore critical to determine the factors which lead to employees terminating their contracts within organisations. It is recommended that future research should focus on determining the root causes of turnover intentions, specifically females, and recommend action plans to organisations to retain these specific skills. A cross-sectional study should not be used for this research objective due to the fact that it only indicates relationships between different variables and does not provide a clear framework of what is actually leading to turnover.

Future research could be directed to helping employees improve their levels of job satisfaction by providing clear information on factors to be implemented to retain skills.

It is also recommended that additional research be done to understand the turnover intention experienced by females in the mining industry. Retaining females is a critical focus for the mining industry and the importance of this is emphasized by the Mining Charter (2004) which stipulates that a certain percentage of females should be represented at all levels in the mining industry. There is also a great focus on development of women in mining. Additional research will assist in retaining females with scarce and critical skills to ensure compliance with the Mining Charter (2004) which prescribes that 10% of the total workforce must consist of females. This presents an interesting future research opportunity. It is therefore recommended that another study be conducted only on females appointed in scarce and critical positions at this specific operation to determine their turnover intention. The items used must be more specific and related to females, as females experience many challenges in the mining industry. If one is able to identify these challenges, recommendations can be made to assist in retaining them.

In order to overcome language barriers so typical of the South-African context, the measuring instruments could be translated into the eleven official languages recognised by the South-African constitution. During the process of collecting data, some employees did experience difficulty in understanding the meaning of some of the English terms in the questionnaire. It was therefore necessary to be present to assist with explaining some of the terms. This problem can be eliminated in future if the questionnaire is developed in other languages, since a lack of understanding the questions might have a negative impact on final results obtained in this study. The recommendation for future research is to consider the dominant languages in ones target population before distributing questionnaires. This will assist in pro-actively addressing language barriers.

REFERENCES

- Anseel, F., & Lievens, F. (2007). The long-term impact of the feedback environment on job satisfaction: A field study in a Belgian context. *Applied Psychology: An International Review*, 56(2), 254–266.
- Anderson, R. A., Corazzini, K. N., & McDaniel, R. R. Jnr. (2004). Complexity science and the dynamics of climate and communication: Reducing nursing home turnover. *Gerontologist*, 44(3), 378–388.
- Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: the role of social support and police organisational variables. *New Zealand Journal of Psychology*, 33(1), 8–16.
- Eisenberger, R., Stinglahanber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organisational support and employee retention. *Journal of Applied Psychology*, 87, 565–573.
- House, R. J., & Wigdor, L. A. (1967). Herzberg's dual-factor theory of job satisfaction and motivation: A review of the evidence and a criticism. *Personnel Psychology*, 369–389.
- Lotz, T. & Donald, F. (2004). Stress and communication across job levels after an acquisition. *South African Journal of Business Management*, 37(1);
- Lutgen-Sandvik, P, Riforgiate, S., Fletcher, C. (2011). Work as a source of positive emotional experiences and the discourses informing positive assessment. *Western Journal of Communication*, 75(1), 2 – 27.
- Mansourian, Y. (2008). Exploratory nature of, and uncertainty tolerance in, qualitative research. *New Library World*, 109(5/6); 273–286.
- Martin, A., & Roodt, G. (2008). Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, 34(1), 23–31.
- Mining Charter (2004). Broad-Based Socio Economic Empowerment Charter for the Mining Industry. Retrieved 2 October 2010 from the World Wide Web, available at: http://www.dme.gov.za/minerals/mining_charter.stm
- Ting, Y. (1996). Analysis of job satisfaction of the federal white-collar work force: Findings from the survey of federal employees. *American Review of Public Administration*, 26(4): 439–56.