Impact of age, tenure and engagement on training transfer and employee performance in South Africa

Anil Harrypurshad

Student number: 745979

Tel: 0823892227

Email: aharrypu@randwater.co.za

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2015

ABSTRACT

A firm's strategy has to keep pace with changes occurring in today's rapidly changing business landscape. To achieve success organisations have to leverage all means at their disposal including human resources. Employee development and engagement have long been regarded as major contributors to organisational performance. Employee engagement in particular has received much attention from organisations as a key tool to improve performance. Organisations have spent millions on improving engagement with moderate success in some instances. This report gives a different perspective and also looks at the contribution made by training transfer, thus allowing employers to focus in terms of the antecedents of employee performance towards leveraging the best return.

This study was conducted in Gauteng province, South Africa and examines the impacts of employee training transfer and engagement on performance. Employee role behaviours are used as proxies for performance. The impact of age and tenure on these relationships is also examined. The research methodology utilised is quantitative with a positivist approach. Data was collected via an online survey of respondents from various industry segments. Correlation, regression and moderation analysis was utilised to represent, estimate and test the relationships driving employee performance. The moderating effect of age and tenure on these relationships was also examined.

Key findings within the research indicate that a link exists between training transfer, engagement and performance which may deserve employers' attention. The findings are consistent with existing literature. Employee behaviour was used as a proxy for performance and shows the extent to which training transfer and employee engagement influences it. We found that training transfer and generalisation is closely associated with positive workplace behaviours such as organisation citizenship behaviour and in-role behaviours and negatively related to counterproductive work behaviours. The moderating effect on the transfer – performance and engagement –performance relationships by age and tenure was confirmed. Older employees were found to

have a greater degree of training transfer and performance while younger employees were more engaged. The key finding being that the transfer of learnt skills may have a greater influence on performance than employee engagement.

Thus, in conclusion, this study may positively influence the way organisations focus their employee performance improvement efforts. This may allow for a greater investment return and maximise performance improvement opportunities. Employers' obsession with engagement as the most effective tool to improve performance has been questioned in the results of the study. It may allow employers to include training transfer evaluation as part of performance improvement initiatives. The reluctance of employers to employ older workers is also brought into question with these results. The benefit of the study, to business, is that it allows organisations to re-evaluate where they spend available funds to maximise performance i.e. engagement or training transfer and generalisation to obtain greatest impact. The influences of organisational climate and practices also play a key role. It also allows organisations to revisit their recruitment practices, given some of the findings. However it must be noted that there are limitations to these findings and key decisions must be evaluated using organisational data before implementation but the study does provide some questions regarding conventional human resource thinking around the benefits of employee engagement initiatives as opposed to training transfer initiatives.

DECLARATION

I, Anil Harrypurshad, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

_____

Anil Harrypurshad

Signed at ……

On the …….. day of …… 20…..

DEDICATION

This research is dedicated to all the pioneers of the South African Human resources community. I would like to exnd my gratitude to my family, classmates and lecturers for their continuous support and encouragement throughout my studies.

ACKNOWLEDGEMENTS

I hereby would like to acknowledge the following people:

- My supervisor, Professor Greg Lee, for his contribution and patience throughout the research process.

- My family, Renee, Kiara and Alisha Harrypurshad for their assistance and patience throughout my studies and the research process.

- To all participants who completed the survey and shared their experiences.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to examine the role of employee age and tenure on the training transfer and engagement relationship with employee performance in the South African context.

1.2 Context of the study

Key concepts in this research include age, engagement and tenure; training transfer in South Africa; employee behaviour in South Africa

The world is rapidly changing at a scale and pace never before experienced. A firm's strategy has to keep pace with these changes and to achieve this, employees must understand and be equipped with skills to adapt and navigate these uncertainties. To equip employees for these changes and improve performance, organisations have to train employees and regard training as an investment in the business (Goldstein and Gilliam, 1990). Investments undertaken by organisations must deliver a return and it is therefore imperative to comprehend the factors that influences the return on investment from training spend. Literature suggests that only 10 per cent of training spent leads to constructive transfer of learnt skills (Fitzpatrick, 2001). An arbitrary approach is usually adopted and does not deliver the desired results because it may be aimed at the incorrect employee segment or factors. This may hinder the strategic direction of the organisation. Improving skills levels through learning can significantly increase productivity and contributes to expanding and building competitive industries (Strong, 2000). Increased performance is driven by increased productivity and consequently organisational success. Training may contribute to improved productivity and therefore improved work performance hence the contributing influences of training transfer must be understood (Yamnill and McLean, 2010). The association of training transfer and employee behaviour is also important as a means to determine the return on investment

from training. Employee engagement has been supported as being associated with organisational performance (Simpson, 2009). It has therefore been viewed as a means of improving performance. Employee behaviours are a proxy for performance.

South Africa has a history of unequal education and employment practices due to the legacy of Apartheid which has resulted in high levels of unemployment and poverty post-apartheid. The governments focus post 1994 has been on developing an efficient and skilled labour force which would be desirable towards reducing poverty and unemployment (Maboa, 2009). To address these challenges the government introduced amongst others the Skills Development Act 1998 (Brendan and Down, 2000).

This Act and the Skills Development levies Act, 1999 brought about new programmes and funding mechanisms aimed at increasing training spend towards skills development (Maboa, 2009). The aim was to improve skills and productivity to compete effectively globally and correct disparity due to Apartheid as well as develop a cohesive and inclusive society (Erasmus and Van Dyk, 2003). This caused an escalation in the amount companies in South Africa spend on training and skills development. However all investment must realise a return to an organisation and in this case the return can be measured by an improvement in performance.

Baldwin and Ford (1988) defined training transfer as the implementation of newly aquired skills and behaviours in the workplace, and the maintenance of these skills and behaviours over time. Subedi (2004) contended that training transfer is the level to which employees implement acquired skills and approaches. These definitions expand the traditional believe that it’s only the transfer of knowledge during the training intervention that is important. The application of this knowledge is also relevant and may affect the performance of the individual in his duties. There is literature that supports the view that transfer of training leads to improved performance, but the important factor is that transfer must occur to realise this improvement in performance. This leads to the analysis of the influences that promote transfer and performance.

To remain competitive in the global environment organisations need to leverage the human capital it harnesses. Human resource is a critical and valuable resource in most organisations (Pfeffer and Veiga, 1999). To be competitive organisations need employees who achieve objectives aligned to the firm's. This implies that to gain competitive advantage organisations must retain and harness the skills of their employees. This will increase job tenure and commitment. As tenure increases, so does age and these factors may have an impact on training transfer. Tenure in the perspective of this paper is the experience the individual employee has within the current job and organisation. As the employee gains job experience through tenure and gets older, changes in performance may occur (Waldman and Avolio, 1993). The decremental theory of aging advocates that advancement in age causes a decline in abilities (Giniger et al, 1983). This may affect acquisition of new skills and subsequently performance. However, literature review has proved inconclusive in defining an firm association between ageing and performance. Understanding the role of age and tenure on training transfer and performance might allow organisations to plan and execute training interventions more adequately towards maximising the training investment.

1.3 Problem statement

1.3.1 *Main problem*

This study investigates the association of engagement and training transfer with employee performance behaviours as well as establish the role of age and tenure.

1.3.2 *Sub-problems*

- To assess the association between training transfer and in-role behaviour, organisation citizenship behaviour and counterproductive work behaviours.

- The second sub problem is to assess the association between employee engagement and in-role behaviour, organisation citizenship behaviour and counterproductive work behaviours.
- The third sub-problem is to assess the extent to which age affects these relationships.
- The fourth sub-problem is to examine the impact of tenure on these relationships.

1.4 Significance of the study

It is widely accepted that when organisations train employees there will be a limit to the knowledge transfer and the application of the learnt skills to the work situation in the short to medium term. The challenge has become stronger given the rate at which the world is changing. The rapidly changing business environment affects all aspects of business including technology, social interaction, environmental practices and sustainability. In order to keep pace with these changes, companies need to be dynamic in their approach to their strategies. Employees are central to any strategy as they are an important resource. It is therefore important that the workforce is sufficiently skilled to adjust to the altering business atmosphere and strategy. Resource allocation in this dynamic environment is a challenge and resources are usually allocated to the projects that bring the greatest return. It is therefore critical that the return on training investment is demonstrated and the factors affecting it are understood. Baldwin and Ford (1988) suggested three individual factors including the trainee individualities, the work situation or culture and training design as individualities of employees that affect training transfer. The trainee characteristics may include age and tenure and therefore impact training transfer.

There is agreement that unless acquired knowledge, skills , behaviours and attitudes are generalised through training and maintained over time, no value will be extracted from the training (Kozlowski and Salas, 1997). This means that the training spend is wasted if it does not translate into tangible increases in

performance and benefit to the organisation. According to Swanson (1995), transfer of training is required to link individual changes to the organisation's benefit. Learning is of no value unless it results in a positive impact or influence on performance (Holton *et al*., 1997). Therefore understanding the factors that affect this learning and implementation of the learning into the work environment will assist business in maximising the return on the training investment. The business benefit arises from the association between training transfer and improved performance derived positive employee role behaviours

Existing theories have documented factors that contribute to training transfer. Baldwin and Ford (1988) suggested three categories 1) trainee individualities, training design and work environment 2) learning and retention and 3) application of training. Very few have studied the influence of age and tenure on training transfer which falls into the categories of trainee characteristics. The decremental theory of aging suggests that advancement in age causes a decline in abilities (Giniger et al., 1983). This may affect skills acquisition and application. It is assumed that training transfer decrease with age but very few studies have examined this in South Africa. This may have an impact on the age demographic towards which organisations focus their training efforts towards realising sufficient training transfer to improve performance in the long run.

In South Africa few articles have studied the relationship between age, tenure, training transfer, engagement and performance. There is an appreciation that the work environment and the individual attributes of the learner are equally important for skills acquisition and application as well as engagement. The influence of age and tenure on the implementation of training to the benefit of the organisation will assist business in prioritizing and identifying areas of investment for training, to realise maximum benefit. Age and tenure also influence employee engagement and attitude. Further, the South African government is considering ways of improving productivity and employment level. Part of these considerations include a youth wage subsidy, therefore understanding the dynamics of younger workers and their impact at the

workplace will assist in predicting and accessing the possible outcome of such interventions.

1.5 Delimitations of the study

- This study includes a wide spectrum of organisations across different industries in South Africa only.
- This study excluded employees who had no internet access.
- This study relies on responses from managers and their subordinates on their performance improvement or lack thereof based on the training intervention and their recollection of their experience.
- The study is conducted across different demographic profiles i.e. age, race, tenure and skills categories in Gauteng province only.
- The study measures organisational citizen behaviour and counterproductive work behaviour in predominately medium to large organisations across different industry sectors.

1.6 Definition of terms

- Employees – Individuals employed in an organisation.
- Training transfer – The application of learnt skills and behaviours to the workplace and the maintenance of such skills and behaviours over time (Baldwin and Ford, 1988).

- Tenure – The period an employee is employed in a specific job within an organisation i.e. job experience.
- OCB - “behaviour that is discretionary not directly or explicitly recognised by the formal reward system and in the aggregate promotes the efficient and effective functioning of the organisation.” (Williams and Anderson, 1991).
- CWB - Counterproductive work behaviour may be carried out by individuals intentionally wanting to harm the organisation.
- IRB – in-role behaviour is expected behaviour of an employee at the work place (Katz et al., 1964).
- Engagement - Employee engagement is defined as the level at which an employee is involved in performing his role (Saks, 2006).

1.7 Assumptions

- International academic literature sufficiently addresses the key drivers for training transfer.
- The sample represents the general transfer of training impact on performance across different job categories and industries.
- The age and tenure have the same effect across job categories and industries.

CHAPTER 2. REVIEW OF LITERATURE

2.1 Introduction

There is a constant need to revise strategies to gain competitive advantage in the workplace. Organisations have realised the need to constantly improve the skills and knowledge of employees towards improving work-related attitudes (Tannenbaum and Yukl, 1992). Organisations have been increasing their training spend and as a result it is becoming important to show that the return on this investment is fully realised. Literature suggests that only 10 per cent of training spent leads to constructive transfer of learnt skills (Fitzpatrick, 2001). This is occurring throughout the world and South Africa is no different. In terms of economic literature, the investment return from training is best measured by an increase in individual performance (Wang et al., 2002). Organisations are increasingly structuring training interventions to build technical expertise and improve competitive advantages (Rosow and Zager, 1988). Firms have the expectation that their return on investment from training will be achieved via improved job performance of trainees. To demonstrate this return on investment and the factors affecting the return, studies have focussed on the impact of training transfer to the work environment towards improving performance. There is an assumption that the training spend will result in increased firm performance (Salas and Cannon-Bowers, 2001).

The following literature review first defines training transfer and the individual and environmental characteristics that affect its effectiveness. The effect of training transfer on employee role behaviours is also explored. The relationship between training transfer and counterproductive work behaviour, in-role and organisational citizenship behaviours are then reviewed. Employee engagement and its association with employee behaviours are also examined. This is done by reviewing journals and available literature on training transfer and aspects that influence it. Thereafter the influences of trainee individualities like age, tenure engagement and motivation are explained. The theoretical framework is largely centred on the Baldwin and Ford's (1988) transfer model and Kahn's

(1990) proposition on employee engagement. The review then goes on to test the framework of Baldwin and Ford (1988) as related to the sub problems.

2.2 Factors affecting training transfer

This study examines the role of age and tenure on training transfer and performance. The association between organisational citizen behaviour and counterproductive work behaviour with training transfer is also explored. The study also examines the impact of age and tenure on the association of employee engagement and performance. The effectiveness of this transfer of training plays a role in determining the investment return from training and employee development in organisations. Targeted training has the power to increase organisational performance when the knowledge, skills and abilities of employees are leveraged effectively (Becker and Huselid, 1998). It is therefore imperative to comprehend the factors affecting training transfer towards maximising the return on investment. It is therefore imperative that the link between training transfer and performance is confirmed and the influencing factors, understood.

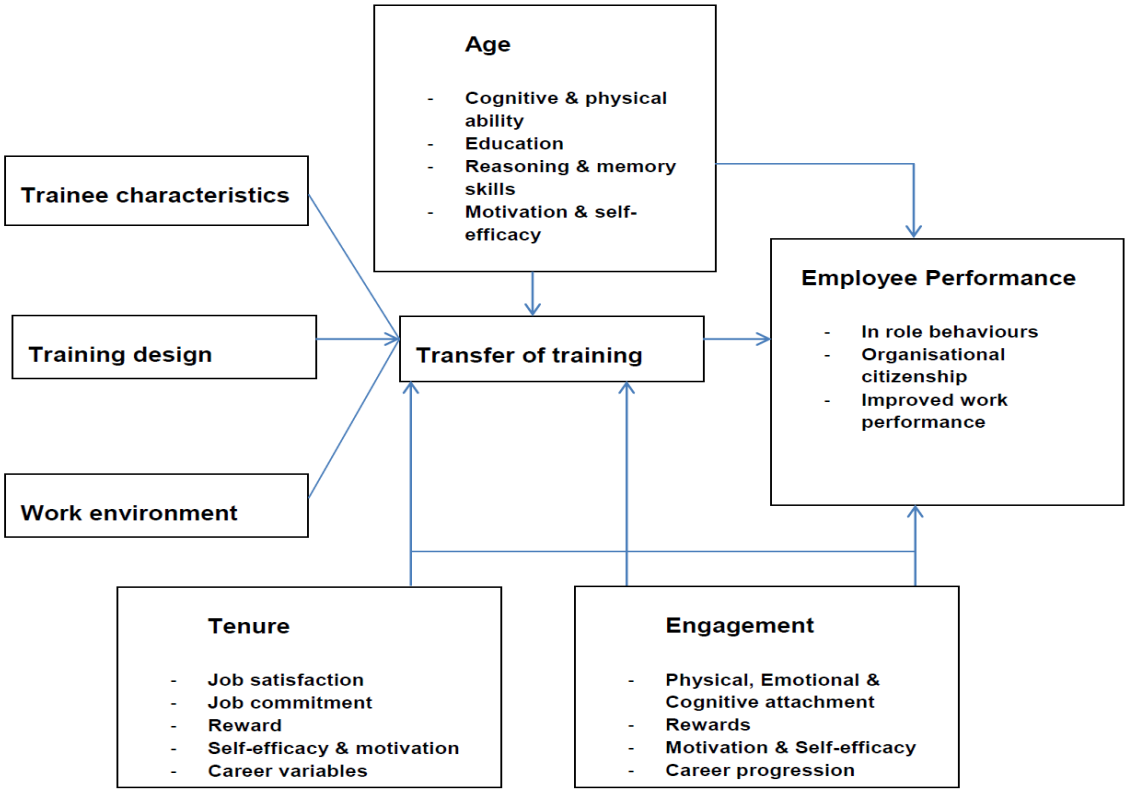
Training Transfer

Baldwin and Ford (1988) defined training transfer as the implementation of acquired skills and behaviours in the workplace, and the continued use of these skills and behaviours. Wexley and Latham (1991) contended that the level of skills application is determined by the extent to which the required skills obtained during training are implemented in the workplace. Baldwin and Ford (1988) also recognised employee individualities, training proposal and work situation as variables that predict the effectiveness of training transfer (Figure 1). Literature describes a “transfer problem” which implies that trainees are not improving their behaviour and job performance in order to improve workplace performance (Kozlowski et al., 2000). Perkins and Salomon (2012) suggested that learners’ play a significant role in electing to practice what they have learned and that this is a cognitive activity. This relates to the motivation of the

learner to either learn or transfer the learnt skills. Baldwin and Ford (1988) also suggested motivation as a predictor variable.

Training transfer is influenced by many factors including trainee individualities, employment context and training strategy and opportunity to implement which augment the performance of the employee and organisation (Holton et al., 2000). This was supported by Burke and Hutchins (2007). If learned knowledge, behaviour, attitude and skills are not implemented to the work setting, it is of little value especially if it's not maintained over time (Ford, 1997). Training transfer is a function of the quality of training presented (Campbell and Campbell, 1988). Therefore, understanding the influencing factors under which training transfer occurs and the trainee characteristics that contribute towards effective training transfer is important.

Figure 1.1: Adaptation of Baldwin and Ford (1988) transfer model



Trainee Characteristics

The trainee should be the focus of the training transfer process yet little research exists that examines the variables that affect the individual. Baldwin and Ford (1988) recognised that trainee individualities affect the transfer process. Trainee characteristics consist of trainee motivation, skill, personality and ability amongst others (Baldwin and Ford, 1988). The role of individuals in areas of leadership and decision making has been recognised to help predict behaviour (Bandura, 1986). Trainees' attitudes, values, expectations and interests affect training effectiveness and transfer (Noe, 1986). Trainee characteristics can inform training transfer and solving performance problems (Stewart, 1986). Trainee engagement, age, self-efficacy and tenure may be contributing factors. Personality variables of the trainee may also affect transfer (Baldwin and Ford, 1988)

Training transfer has emerged as being dependant of two factors, the first being individual characteristics i.e. the individual's confidence in their capability to implement newly learnt skills, also called self-efficacy (Salas and Cannon-Bowers, 2001). The second predictor of training transfer is the work environment i.e. transfer climate (Tracey et al., 1995). Bandura (1997) concluded that individuals high in self-efficacy will always endure when challenged. Self-efficacy is positively correlated to enthusiasm to transfer (Carlson et al., 2000; Tracey et al., 2001). This relates to the trainees' ability and motivation to transfer training towards improving performance.

Environmental factors

There is recognition that the post training work environment can influence training transfer (Tannenbaum and Yukl, 1992). This may also affect any expected enhancement in performance as a consequence of the training intervention. There are various work environment factors that hinder or aid training transfer (Cromwell and Kolb, 2004).

Firm climate includes elements associated to the opportunity to implement learnt skills, constraints to transfer and consequences of implementing newly aquired abilities on the job (Holton et al., 1997). Trainees need the opportunity

to perform the newly acquired skills (Ford et al., 1992) or skills decay will result over time (Arthur et al., 1998). Foxon (1997) suggested that managerial backing for the application of new skills at work results in superior transfer. Birdi et al. (1997) found that transfer is affected by co-worker or peer support. Peer support relates to the support that trainees get from their peers and co-workers (Chiaburu and Marinova, 2005). A supportive climate is positively linked to training transfer (Goldstein, 1993). There may be a direct link between worker engagement levels and organisational obligation which enhances job satisfaction, innovation, improved health proactive behaviour, learning motivation and decreased staff turnover (Schaufeli and Salanova, 2007). This may imply that a work environment in which employees are satisfied, confident and empowered may lead to greater training transfer.

2.3 Effect of training transfer on employee performance behaviours

The first sub problem is to assess the association between training transfer and in-role behaviours, organisational citizen behaviours and counterproductive workplace behaviours.

2.3.1 *Training and job performance*

The reason for training at organisations is amongst others to advance performance (Swanson, 1995). Unless training translates into performance, no value is derived (Holton et al., 1997). Training is likely to result in improved performance by implementing skills learnt during the training intervention. Improved performance as a consequence of training should be positive (Hill and Lent, 2006). Autor et al., (2003) suggested that training had a linear relationship on job performance. Barber (2004) found that training may result in increased innovation and skill. Garcia (2005) found, in a study that training programs directly resulted in improvements in productivity, customer satisfaction, and employee commitment and hence improved business success. Performance can be broken down into various aspects which are in role performance, organisational citizen behaviour, work contentment and worker engagement.

Trainees in organisations which support the application of newly acquired skills demonstrate more training transfer (Ford et al., 1992). A factor impacting training transfer is the opportunity to perform trained tasks at work (Baldwin and Ford, 1988). Baldwin and Ford (1988) proposed that a supportive environment and an environment which provides the opportunity to "use" the training are factors which aid the acquisition and transfer of skills in the workplace. Guest (1970) proposed that training may be an element that may advance performance. The level of performance improvement due to training must be looked at together with other HR practices (Lynch and Black, 1998). Bratt (2000) also demonstrated the link between training and performance. Training has the potential to manifest in improved workplace behaviours (Bartel, 1994). These behaviours may include IRB's and OCB's. The organisational support towards a learning culture may also supports training transfer (Kontoghiorghes, 2001). In firms that have a learning culture, increases in job satisfaction, and performance has been observed (Watkins and Marsick, 2003). Training influences the strategic knowledge of the trainee i.e. when the specific skill must be applied (Kozlowski et al., 2001). This strategic knowledge may then translate into improved performance.

2.3.2 *Organisational citizen behaviour (OCB) and in-role behaviour*

Theory suggests that employee engagement and commitment also includes aspects of organisational citizenship behaviour and contributes to employee performance. Organisational citizenship behaviour (OCB) is described as "behaviour that is discretionary, not directly or explicitly recognised by the formal reward system and in the aggregate promotes the efficient and effective functioning of the organisation." (Williams and Anderson, 1991). OCB facilitates the employee's ability to go beyond the formal job requirements, to the organisation's benefit (Kataria et al., 2013). Employee attitudes may be moderated by environmental reasons which impact job fulfilment and retention (Gartner, 2000; Mobley, 1977). A feeling of competence and valued goals could be related to motivation and well-being (Ryan and Deci, 2001). Schaufeli and Salonova (2007) stated that engaged employees may have the ability to face work challenges, leading to self-efficacy.

In role behaviour was defined by Katz et al. (1964) as expected behaviour of an employee at the work place. They suggest in-role behaviours as the behaviour defined as per their job. William and Anderson (1991) defined it as behaviour required for the completion of their work tasks. Employees displaying IRB's do what is required and may be indifferent to the organisation's performance. They may engage in work behaviour that is positive and that benefits them. Tannenbaum et al. (1991) concluded that an individual's optimistic work outlook may advance motivation to apply training towards improving work performance. Expectancy theory suggests that trainees' attitudes towards their job may influence the transfer of training (Noe, 1986).

2.3.3 *Counterproductive work place behaviours*

Counterproductive work behaviour may be carried out by individuals intentionally wanting to harm the organisation. Robinson and Bennett (1995) suggested that these acts include absenteeism without cause, misuse of company assets, sexual harassment, working slow, sabotage, theft amongst others. Counterproductive work behaviours may be carried out by individuals intended to harm stakeholders, the organisation and its employees (Marcus and Schuler, 2004). Fox et al. (2001) suggested workplace stressors as a root cause for such behaviour. Spector and Fox (2005) suggested that personality traits such as emotional stability, openness to new experiences, conscientiousness and extraversion may explain counterproductive work behaviour. Not being open to new experiences may be counterproductive and also hinder training transfer because it is the opposite of trainee characteristics required for effective training transfer as mentioned above. Individuals that believe that the organisation has broken the psychological contract between them may engage in counterproductive work behaviours (Rousseau, 1989).

Counterproductive work behaviours may have negative consequences for the organisation. Given the intention of the employee to harm the organisation, training transfer under this psychological state may be minimal. Spector and Fox (2005) suggested that counterproductive work behaviours can impede performance. Equity theory posits that individual's moderate their level of output

to be similar to others do similar jobs (Adams, 1963). This may also explain CWB in specific individuals.

2.3.4 *Hypothesis 1*

H1a : Training transfer is positively associated to in-role behaviours.

H1b : Training transfer is positively related to individual focused organisational citizenship behaviour.

H1c : Training transfer is positively related to organisation-focussed organisational citizenship behaviour.

H1d : Training transfer is negatively related to counterproductive work behaviour.

2.4 Impact of engagement on employee performance behaviours

The second sub problem is to assess the association between employee engagement and in role behaviour, organisational citizenship behaviour and counterproductive work behaviours.

2.4.1 *Employee engagement*

Worker engagement is examines the workers involvement in his work role (Saks, 2006). Saks (2006) further stated that engagement has two aspects firstly, related to the employees involvement in the performance of their job (job engagement) and secondly, organisational engagement which relates to a psychological attachment to an organisation. This engagement translates to a high degree of firm commitment and results from a psychological attachment and resulting in the employee displaying increased job performance. Kahn (in Rich et al., 2010) suggested that individuals feel safe in organisations that are perceived as trustworthy, secure and predicable. This may result in increased tenure.

Organisational commitment stems from the identification by employees firms aims and an aspiration to remain employed at the firm (Mowday et al., 1982). This is a desire to stay at the organisation and can be one of the factors contributing to increased organisational tenure. Psychological empowerment is present when an employee believes they have control over their work role (Spreitzer, 1995) Specific psychological conditions increase engagement (Kahn, 1990). Kahn (1990) submitted that employees must be intellectually, physically and enthusiastically engaged for them to thrive at work.

2.4.2 *Engagement and performance*

There exists support for a link between engagement and firm performance (Simpson 2009). Therefore, an engaged employee may be more inclined to increase job performance. A positive work environment positively affects the transfer climate and any performance improvement (Tracey et al., 1995). Employee perceptions of choice and control, acknowledgement and incentive, a reassuring work environment and equality at work may advance engagement (Maslach et al., 2001), therefore a perception by the employee of the opposite condition may hinder work engagement and performance. Engaged employees are energetic and are able to deal with work pressures and demand by having a connection with their work roles (Schaufeli and Salanova, 2007).

OCB facilitates the employee's ability to go beyond the formal job requirements, to the organisation's benefit (Kataria et al., 2013). Employee attitudes may be moderated by environmental factors which sway job satisfaction and staff retention (Gartner, 2000; Mobley, 1977). A feeling of competence and valued goals could be related to motivation and well-being (Ryan and Deci, 2001). The social exchange and reciprocity theory may be used to explain OCB behaviour, which suggests that goodwill is exchanged between parties (Hopkins, 2002). Organ and Konovsky (1989) stated that OCB can be broken down into two dimensions, i.e. OCB-I and OCB-O. OCB-I relates to behaviour that benefits individuals and indirectly the organisation and OCB-O is behaviour that benefits the organisation directly. OCB's are discretionary behaviours and a decreasing

level of these types of behaviours may indicate withdrawal from the organisation (Chen et al., 1998).

Counterproductive work behaviours may be carried out by individuals intended to harm stakeholders, the organisation and its employees (Marcus and Schuler, 2004). Kahn (in Rich et al., 2010) suggested that individuals feel safe in organisations that are perceived as trustworthy, secure and predicable. Kahn (1990) suggested that employees must be cognitively, physically and emotionally engaged for them to thrive at work. Psychological empowerment refers to an employee's motivation and experience about himself in his work role (Spreitzer, 1995). When employees experience an empowering work environment they are more inclined to engage in their work (Greco et al., 2006). Therefore employee engagement positively influences employee work and extra role behaviours.

2.4.3 *Effect of engagement on self-efficacy and motivation*

Tannenbaum et al. (1991) concluded that an individual's optimistic work outlook leads to more motivation to transfer training towards improving work performance. A workers inspiration to study increases with commitment to the organisation (Naquin and Holton, 2002). Employees who are motivated achieve a better application of new skills at work (Machin and Fogarty, 1997).

Noe (1986) stated that a trainee's self-efficacy has an influence on his incentive to transfer. A workers self-efficacy may also been linked to positive training transfer when an individual's expectancy is that a new skill can be performed (Bandura, 1977). Tsai and Tai (2003) found that management directed training interventions resulted in increased training motivation. When the need for the training intervention was explained to employees it increased trainee motivation and perceptions regarding the value of the training (Quinones, 1997). Motivation can be an influential factor when a trainee agrees to attend training (Noe and Wilk, 1993). This may be a result of the shared belief that the training is required for the organisation's benefit.

Employees' self-efficacy is increased with empowerment and removal of perception of powerlessness (Conger and Kanungo, 1988). Psychological empowerment refers to an employee's motivation and experience about himself in his work role (Spreitzer, 1995). When employees experience an empowering work environment they are more inclined to engage in their work (Greco et al., 2006). Therefore employee engagement positively influences tenure, performance and transfer of training.

2.4.4 *Hypothesis 2*

H2a: Employee engagement is positively associated with in-role behaviours.

H2b: Employee engagement is positively associated with individual-focussed organisation citizenship behaviours.

H2c: Employee engagement is positively associated with organisation-focussed organisation citizenship behaviours.

H2d: Employee engagement is negatively associated with counterproductive work behaviour.

2.5 Role of age on transfer of training and work performance.

The third sub-problem is to assess the extent to which age affects these relationships.

2.5.1 *Effects of Age*

Verhaeghen and Salthouse (1997) suggested that cognitive abilities, speed, memory and reasoning may decline with age and accelerated decline may be noted above 50 years of age. The changes in mental abilities due to age are consistent across all populations around the world irrespective of sex (Park et al., 1999). All individuals irrespective of their initial abilities may perhaps incur the age influenced alterations in mental activities (Deary et al., 2000). Salthouse (2000) argued that while speed and strength might decline with age, pragmatic

abilities can improve. This may explain the effectiveness of older workers in roles requiring staff motivation and management.

Willis and Schaie (1986) suggested that the decline in reasoning skills may be stabilized and reversed. Different mental abilities could decline at different rate over an individual's life span (Schaie, 1994). Mental abilities related to problem solving, reasoning and speed of absorbing new material may be reduced at older ages (Horn and Cattell, 1966), while mental abilities related to accumulate knowledge and word influence might increase. Schwartzman et al. (1987) found that oral skills are unaffected while cognitive abilities and response time may possibly decline with age.

Increased age may cause a decline in dexterity, strength, speed and abilities (Giniger et al., 1983; Rhodes, 1983). Age might result in decreased performance, memory, reasoning and speed (Lindenberger and Baltes, 1994). Kliegl and Mayr (1992) suggested that cognitive variables may affect age related influences the most. Aging may also result in lower motivation. Older workers go through a "grinding down" stage and lower their expectation (Wright and Hamilton, 1978). Giblin (1986) proposed an inverse relationship between ambition and age.

Individuals change and this might alter worker output (Waldman and Avolio, 1993). Job experience is the situation grounded happenings that a worker endures (Quinones et al., 1995). It is the accumulation of job related skill, practice and knowledge which comes with age. Employees make investments in themselves via job experience and thus enhance their job performance (Ehrenberg and Smith, 2000). Job experience may improve job performance (Weiss, 1990). This suggests that job performance may be influenced over a period as the employee accrues job connected experience while getting older.

The ability of the trainee to retain skills and knowledge may sway his capacity to implement, to the workplace, what he has learnt. Learning is a prerequisite to training transfer (Pineda, 2010). Roberson et al. (2009) suggested that a trainee may use cognitive skills to apply their training outcomes to the work place. A decline in working memory may occur across the adult lifespan from age 20

(Bopp and Verhaeghen, 2005). The cognitive ability to store and activate information increases during childhood and may decline with age (Bjorklund, 1987). Because of a decline in memory and cognitive ability as adults get older, learning and training transfer may be hindered.

2.5.2 *Effect of age on self-efficacy and motivation to transfer*

A workers capability is closely correlated to the skills learnt during training (Baldwin and Ford, 1988). Noe and Wilk (1993) suggested that a trainee's ability and motivation might affect his training effectiveness. Quinones et al. (1995) also demonstrated this relationship. Noe and Schmitt (1986) suggested that worker motivation and work situational variables effect training transfer. Burke and Hutchins (2007) proposed that intellectual aptitude, firm obligation, trainee enthusiasm, personality traits and trainee self-efficacy have an impact on training transfer.

Colquitt et al. (2000) established a linkage between age and enthusiasm to learn such that that older employees displayed a reduced motivation to learn and implement learnt skills. Trainee motivation is an important determinate of training transfer and is more important than course content (Quinones, 1997). There may exist a firm link between motivation and training effectiveness (Noe and Wilk, 1993). There may be an inverse relationship between age and skills acquisition (Kennedy et al., 2008).

Bandura (1986) described self-efficacy as ones confidence in one's capacity to do a given assignment and that there is a affirmative connection between self-efficacy and training transfer. Bandura (1986) stated that a trainee's self-efficacy is influenced by supervisor persuasion, emotional arousal, mastery and vicarious experience. With job experience and age, individuals may master their work roles and may become more confident in transferring what they have learnt.

Ree et al. (1995) suggested that cognitive abilities may directly influence job knowledge. General intelligence might promote self-efficacy (Campbell, 1990)

and help in skills acquisition. Therefore cognitive ability may affect learning ability and effective transfer.

2.5.3 *Age and performance*

Changing work environment due to technology may be problematic due to the possible decline in speed and learning capabilities of older workers (Lindenberger and Baltes, 1994). Cognitive abilities over age may be stable in work roles in which individuals have experience and know well (Colonia–Willner, 1998). Possible age induced decrease in productivity may rise with the difficulty of the job being performed (Myerson et al., 1990). Waldman and Avolio (1993) suggested that job occupation and work environment may moderate the relationship between performance and age. Campbell (1990) suggested that job performance increases with job experience. This may be as a result of age resulting in increased job experience. The connection concerning transfer and performance was explained and age may result in training transfer being more meaningful. Older workers may also have a greater degree of emotional intelligence. Motivation to learn may not be a functional of age but maintained throughout your work life (Krapp, 2002).

2.5.4 *Hypothesis 3*

H3a: Employee age moderates the relationship between training transfer and employee behaviours such that younger employees will have a stronger relationship.

H3b: Employee age moderates the relationship between engagement and employee behaviours such that younger employees will have a stronger relationship.

2.6 Impact of tenure on the transfer of training

The fourth sub-problem is to examine the impact of tenure on these relationships.

2.6.1 *Tenure*

Tenure leads to organisational experience. Organisational experience relates to experience gained at an organisation over time and is different from job experience (Quinones et al., 1995). Through organisational experience employees become familiar with the values, behaviours and customs within an organisation (Chatman, 1991). Feldman (1976) suggested that through socialization employees understand how to gain knowledge of organisation's culture, systems and gain trust and friendship from co-workers and supervisors. This leads to longer tenure at the organisation.

Two views dominate the relationship between organisational commitment and tenure. Griffin and Bateman (1986) stated that the individual develops a psychological connection with the firm by identifying with the firm values, purpose etc. and is therefore committed to maintain an association with the firm. Another view is that put forwarded by Griffin and Bateman (1986) who state that past events place constraints on the employee leaving because certain costs accrue and make it difficult to disengage from the firm.

Thorough increased tenure employees gain seniority and connection (Becker, 1960). Meyer and Allen (1984) stated that younger workers might demonstrate higher commitment since with less job experience, limited job opportunities result and as job experience accumulates more opportunities result and hence decreasing the cost of leaving.

2.6.2 *Effect of tenure on self-efficacy and motivation to transfer training*

Psychological empowerment and intrinsic motivation is associated to the level of involvement of a worker in his role and merely doing the job for the sake of it (Utman, 1997). Psychological empowerment is a cause of task motivation and satisfaction (Thomas and Velthouse, 1990 p668).

Equity Theory stems from the belief that people would like to be engaged impartially (Adam, 1963). Dunnette and Hough (1991) concluded that people

will leave any situation where inequity is felt. Noe (1986) simplified the link between motivation and transfer. Equity is then a function of what the employee feels he should be receiving from his job which may also lead to motivation. This may include leaving the job and lead to reduced tenure if he feels he is not deriving sufficient reward. Candidates who expected job and career improvements where more motivated to transfer training (Clark et al., 1993). It supports Porter and Lawler (1968) theory that motivation is linked to perceived reward. Noe and Schmitt (1986) concluded that students who displayed high work participation are more enthused to learn and implement newly acquired abilities.

Bandura (1986) described self-efficacy as ones confidence in one's capacity to do a job. Bandura (1986) also stated that there is a affirmative association between self-efficacy and level of goal difficulty and has an implication on training transfer. Enhanced self-efficacy is directly proportional to training transfer (Frayne and Latham, 1987). This is positively inked to training performance (Mathieu and Martineau, 1997). An employees work related experience influences the self-efficacy of the trainee (Bandura, 1986).

2.6.3 *Tenure and job performance*

Meyer and Allen (1991, p67) advocated that firm commitment refers to a workers psychological connection and contribution in the firm. They also recognise that there is a cost to leaving the organisation, therefore resulting in increased tenure. There exists a direct connection concerning engagement levels with organisational commitment which enhances worker satisfaction, innovation, improved health, proactive behaviour, learning motivation and decreased staff turnover (Schaufeli and Salanova, 2007). An inverse association between staff leaving and worker satisfaction was established (Sablynski et al., 2002). Employee engagement has a complimentary link with worker tenure, firm output and success (Richman, 2006). Tannenbaum et al. (1991) concluded that individuals who have progressive job attitude have more motivation to implement learnt skills and improve performance. Engaged employees are energetic and are able to deal with work pressures and demand

by having a connection with their job function (Schaufeli and Salanova, 2007). Campbell (1990) endorsed the notion job performance increases with job experience.

A working environment which is seen as mentally harmless and value adding by workers promotes increased job participation and commitment and enhances cognitive job satisfaction and motivation (Brown and Leigh, 1996). Candidates who expected job and career improvements where more motivated to transfer training (Clark, Dobbins and Ladd, 1993). It supports Porter and Lawler's (1968) theory that motivation is linked to perceived reward. There is a link between psychological empowerment and intrinsic motivation which is a factor of the workers involvement in his role and not merely fulfilling the minimum requirements of his job (Utman, 1997). Psychological empowerment is a cause of task motivation and satisfaction (Thomas and Velthouse, 1990 p668). Therefore, job performance may improve with increased tenure. Employee engagement has a affirmative connection with employee retention/ tenure, firm performance and success (Richman, 2006). A negative correlation between turnover and worker satisfaction may exist (Sablynski et al., 2002).

2.6.4 *Hypothesis 4*

H4a: Employee tenure moderates the relationship between training transfer and employee behaviours such that newer employees will have a weaker relationship.

H4b: Employee tenure moderates the relationship between engagement and employee behaviours such that newer employees will have a weaker relationship.

2.7 Conclusion of Literature Review

Frameworks put forward by Baldwin and Ford (1988) amongst others complement each other and examine the factors that affect training transfer and performance. The connection of employee engagement with performance was also examined. However, few studies examined the relationship of training

transfer and engagement with performance in South Africa. This literature review and theory creates the context for examining the trainee characteristics that affect training transfer, engagement and performance in South Africa.

2.7.1 *Effect of transfer of training on work performance*

The first sub problem is to assess the association between training transfer and in-role behaviours, organisational citizen behaviours and counterproductive workplace behaviours as proxies for employee performance.

Hypothesis 1

H1a : Training transfer is positively associated to in-role behaviours.

H1b : Training transfer is positively related to individual focused organisational citizenship behaviour.

H1c : Training transfer is positively related to organisation-focussed organisational citizenship behaviour.

H1d : Training transfer is negatively related to counterproductive work behaviour.

2.7.2 *Role of age on training and performance*

The second sub problem is to assess the association between employee engagement and in role behaviour, organisational citizenship behaviour and counterproductive work behaviours as proxies for employee performance.

Hypothesis 2

H2a: Employee engagement is positively associated with in-role behaviours.

H2b: Employee engagement is positively associated with individual-focussed organisation citizenship behaviours.

H2c: Employee engagement is positively associated with organisation-focussed organisation citizenship behaviours.

H2d: Employee engagement is negatively associated with counterproductive work behaviour.

2.7.3 *Impact of tenure on the relationship between transfer of training and performance*

The third sub-problem is to assess the extent to which age affects these relationships.

Hypothesis 3

H3a: Employee age moderates the relationship between training transfer and employee behaviours such that younger employees will have a stronger relationship.

H3b: Employee age moderates the relationship between engagement and employee behaviours such that younger employees will have a stronger relationship.

2.7.4 *Impact of employee engagement on the relationship between transfer of training and job performance*

The fourth sub-problem is to examine the impact of tenure on these relationships.

Hypothesis 4

H4a: Employee tenure moderates the relationship between training transfer and employee behaviours such that newer employees will have a weaker relationship.

H4b: Employee tenure moderates the relationship between engagement and employee behaviours such that newer employees will have a weaker relationship.

CHAPTER 3. RESEARCH METHODOLOGY

The following study aims to gain knowledge into the key individual and environmental characteristics that can affect the relationship between training transfer and performance in South African work places. This research uses quantitative analysis of secondary data using regression and moderation analysis. This research methodology adopts a positivist approach.

3.1 Research methodology / paradigm

This research methodology is quantitative with a positivist bias. Quantitative research is a means of objectively testing known theories by testing relationships among influencing variables (Creswell, 2009). Therefore this research is testing the sway of individual learner individualities (age, tenure, engagement) and work situation on the link between application of new skills and employee output. A research paradigm reflects our opinions about the world which could be post positivist or post-modernist (Lather, 1986). Positivism uses experimental examination to disclose the facts (Henning et al., 2004, p.17). The model is largely based on an adaptation of the Baldwin and Ford (1988) model. The primary objective of the study is to examine the role of age, tenure, engagement and work situation on learning transfer and performance in South African firms.

3.2 Research Design

This study uses a quantitative research methodology on a secondary data set. Gathering data on motivation, behaviour and concerns of people can be done by means of surveys (Rea and Parker, 1992). Surveys may be a credible tool to gather primary data by academic institutions (Rea and Park, 1992). This study is a secondary analysis of an existing dataset. Secondary analysis of the survey data may allow for new findings to be generated. The data was obtained using a survey research method. The original surveys were completed electronically online by managers and subordinate employees as paired units. There is a

huge body of literature on the key aspects affecting training transfer, performance and the effects of age, tenure and engagement which was considered when the original survey was developed. This is discussed in detail in section 3.5 (Research Instrument Measures) below.

3.3 Population and sample

3.3.1 *Population*

Population refers to the collective or whole of all objects or affiliates that conform to a set of specifications (Hungler and Polit, 1999 p: 37). The population of this research is workers and managers across different industry types based in Gauteng, South Africa. The population consists of managers and employees who have access to the internet because an online survey was the instrument used to gather data. The population consists of managers and employees of a diverse demographic cross section in South Africa. Due to the cross-section of industry, age, tenure and gender, this population can be extrapolated to the wider South African demographic context.

3.3.2 *Sample and sampling method*

According to Evans (2010) a subgroup of a population is a sample. Churchill (1995) contended that a sample may be used to deduce a finds to a bigger population. Due to the large amount of managers, workers and business types, it is impossible to survey all within the population. However, an attempt was made to ensure that a representative section was attained through the full population.

A convenience sampling method was used. This study is a secondary analysis of an existing dataset. Secondary analysis of the survey data may allow for new findings to be generated. Secondary analysis is when data that has been collected by another researcher is analysed. In this case the data was collected by researchers as part of an MBA programme. According to Glass et al. (1981) secondary analysis is the answering of new research questions with old data.

Secondary data analysis allows the researcher to access quality data at a relatively low cost and shorter time (McArt and McDougal, 1985). Online questionnaires where used to retrieve information from managers and employees in grouped pairs. Managers where encouraged to send the link to their subordinates via email after the objectives of the study were explained. This study obtained a sample from organisations across various industries in Gauteng. Further, the confidentiality of the participants was also assured.

Table 3.1: Number of respondents

Respondent type,	Number sampled
Managers	600
Corresponding Employees	600

3.4 Overall research survey design

The research instrument to collect primary data was an online questionnaire. This is widely used in research. The Qualtrics server was used for the automated data assembly. The benefit of utilising an online questionnaire includes the fact that individuals in various locations can participate and it automates the data collection process and hence reducing time to gather data (Wright, 2005). According to Wright (2005) there are disadvantages associated with online questionnaires, including respondents engaging in misrepresentation and data validity. Babbie and Mourton (2001) suggested that there will always be a degree of error no matter how carefully the questionnaire is designed and executed.

Managers were initially approached personally or by email, to obtain buy in as well as the name and email address of the manager's proposed subordinate employee who will also be participating in the survey. The manager was also asked to forward an email to the employee asking for the second survey to be filled in. The employees identified had to be under his/her management for a while and whom the manager has seen go through substantial training. The

identified employee's performance and training transfer is then assessed. The employee is asked questions related to organizational citizenship behaviours, engagement and the work climate in the questionnaire sent to them.

Ethics

A cover letter was sent to all participates to explain the process and seek their permission (Appendix C and D). At the beginning of the survey questionnaire the objective of the study are stated and that the info gathered is for research purposes only. There is also an assurance of confidentiality made to participants. No aspersion will be made about individual participants. The research is only intended to understand behaviour at workplaces in general related to training and training transfer.

3.5 Measures

The research questionnaire was designed to measure trainee performance, work environment, engagement, quantity of training received, training transfer to the workplace, organization citizenship behaviour and counterproductive work place behaviour. The questions were sourced from academic journals and represent the characteristics that were needed for the analysis. The existing measures were adapted to ensure fit with the objective of this research. Survey questionnaires were sent to mangers and employee as paired units and analysed as such.

3.5.1 Description of instrument measures

3.5.1.1 Performance

The first survey was sent to managers who were asked to identify one subordinate employee who has been under his/her management for a while and whom the manager has seen go through substantial training. The manager is asked to assess performance and training transfer of the employee identified. Employee output information is obtained by using the multi-dimension scale

modified from Williams and Anderson (1991). Training application as observed from the managers viewpoint is obtained using a modified version of the 3-item scale from Tesluk et al. (1995), as well as an extra item measuring knowledge sharing by the trained employee. The questionnaire also contains demographic information and information related to industry type. Figure 3.2 below shows an example of the manager questionnaire and answer scale. The complete research questionnaire is included in Appendix A.

Employee performance variable had questions aimed at testing the employee's in role performance which is a measure of an employee's direct contributions to duties (Employee's KPI performance). Some questions were extra role performance which assessed an employee's organizational citizenship behaviours and counterproductive behaviour aspects. These questions are meant to assess an employee's total contribution towards organisational performance.

Table 3.2: Sample of manager questions and scale

Question: Please indicate the extent to which you feel your chosen employee fulfils the following performance criteria:

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	0	10	20	30	40	50	60	70	80	90	100
Adequately completes assigned duties										
Fulfils responsibilities specified in job description										

Question: Please indicate the extent to which you feel the following has been true about the training your employee has received since starting his/her current job:

	Never		Rarely		Sometimes		Often		All of the Time	
	0	10	20	30	40	50	60	70	80	90	100
I notice how training has enabled this employee to use new skills to improve performance.										

3.5.1.2 Training Transfer

The second questionnaire was sent to the employee identified by the manager above. It is important that there is a link between the manager and employee because the data is treated as a paired unit. The employee is asked demographic questions related to sex, qualification, organization start date etc. The employee is further asked questions related to his/her training experiences, including the amount, relevance and transfer of training. Employees are also asked to report on their levels of physical, emotional and cognitive engagement in their jobs, and the innovation climate at their workplace. Training transfer is measured using the same items as asked of managers. The research questions and measurement scales are included in and Appendix B.

Workplace training had a number of questions addressing the respondents' view of the applicability of the learning received, and the amount of training received versus the respondent's requirement. Respondents indicated the hours of formal training they have had per week and how much relevant informal on-the-job training had been provided since starting the job by supervisors or relevant skilled workers. Respondents also indicated how much training they felt they should have received in order to perform well in their current job relative to how much they actually felt they received. The information gathered on employee performance is meant to assess whether there is a retention and application of lessons and skills learnt in training to improving workplace performance. Performance measures assist in indicating how workers see training prospects and whether or not the training is applied in the day to day work environment. It also provides information on the self-efficacy and motivation to transfer training.

Table 3.3: Sample of employee questions and scale

Question: In addition to formal training, how much *relevant* on-the-job informal training has been given to you since you started this job by supervisors, leaders, managers or relevant skilled co-workers:

	Never		Rarely		Sometimes		Often		All of the Time	
	0 10		20 30		40 50		60 70		80 90 100	
Regularity of relevant informal training										

Question: Please indicate the extent to which you feel the following is true:

	Not at all			Occasionally				Frequently		
	0 10		20 30		40 50		60 70		80 90 100	
I have incorporated skills I have learned on training into daily work activities										

Question: Please indicate below the extent to which you believe that your organization has done *worst or better than your relevant competitors* on each of the following innovation-related issues in the last three years:

	Below Competitors			Roughly equal to competitors				Better than competitors		
	0 10		20 30		40 50		60 70		80 90 100	
Number of new products/services introduced										

Question: Please indicate below the extent to which you believe that your organization has done *worst or better than your relevant competitors* on each of the following innovation-related issues in the last three years:

	Below Competitors			Roughly equal to competitors				Better than competitors		
	0 10		20 30		40 50		60 70		80 90 100	
Number of new products/services introduced										

Question: Please indicate the extent to which you feel the following is true of you in your current job

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	0	10	20	30	40	50	60	70	80	90	100
I work with intensity on my job										

3.5.1.3 Engagement

Job engagement information was obtained using the multiple-dimension 18-item scale of Rich et al. (2010). The questions attempt to assess the employee's feelings about commitment and organisational citizenship behaviour in their respective working environment. The questions were based on the individuals' feelings on their job output, work environment, job complexity and personal interest. The managers were also asked to assess the employees' engagement and commitment to their work. In order to avoid biase responses, some of the questions were intentionally worded in the reverse. A high score then indicated a adverse perception of employee's performance. These items were appropriately recoded (reversed) before conducting the analysis.

3.5.2 Factor structure variables

The following section describes factor structure tests of the multi-item scales (the outcome behavioural variables in-role behaviours, individual-focussed organizational citizenship, organisation-focussed organizational citizenship, and counterproductive workplace behaviour) as well as those of engagement (physical, cognitive and emotional engagement).

3.5.2.1 Factor Structure Tests of Multi-Item Scales

Initially, exploratory factor analysis is attempted with all behaviour and engagement items included. However, this solution does not work well, with high levels of cross-loadings and poorly defined factors.

Therefore, I separate the factor analysis into one for the four behavioural sub-factors and another for the engagement items.

3.5.2.2 Behaviour Items Factor Analysis

For the behavioural items, I conducted an exploratory factor analysis of all variables, using principal factor analysis with a Promax rotation. The initial solution has a good fit, with MSA = .92 and no individual variable having an MSA lower than .85 were found.

Analysis of eigenvectors as seen in Table 3.4 shows that four eigenvalues provide explanatory power of 103%, with the fourth factor providing 5% of variance. Thereafter, added factors provide little value. The screen plot also suggests that four factors are appropriate.

Table 3.4: Table of Eigenvalues for Behavioural Items

	Eigenvalue	Difference	Proportion	Cumulative
1	8.00	5.09	.63	.63
2	2.91	1.37	.23	.86
3	1.54	.94	.12	.98
4	.60	.28	.05	1.03
5	.32	.19	.02	1.05
6	.13	.02	.01	1.06
7	.11	.01	.01	1.07
8	.10	.05	.01	1.08
9	.06	.04	.00	1.08
10	.02	.04	.00	1.08
11	-.02	.01	.00	1.08
12	-.02	.02	.00	1.08
13	-.04	.02	.00	1.08
14	-.06	.02	.00	1.07
15	-.08	.00	-.01	1.07
16	-.08	.03	-.01	1.06
17	-.11	.02	-.01	1.05
18	-.13	.02	-.01	1.04
19	-.15	.02	-.01	1.03
20	-.17	.03	-.01	1.02
21	-.20		-.02	1.00

Note: Eigenvalues of the Reduced Correlation Matrix: Total = 12.73 Average = 0.606.

Therefore, four factors are retained. Table 3.5 below shows the rotated factor pattern loadings, which as can be seen, successfully distinguishes between the

expected factors, with no item having high cross-loadings or failing to load on any factor, and no factor with too few items or overly weak items.

Table 3.5: Rotated Factor Pattern Loadings of Behaviour Items

	Factor1	Factor2	Factor3	Factor4
Takes time to consider co-workers' problems and worries (OCBI)	.84			
Helps others who have heavy workloads (OCBI)	.77			
Takes personal interest in other employees (OCBI)	.74			
Helps others who have been absent (OCBI)	.74			
Goes out of way to help new employees (OCBI)	.73			
Assists supervisor with his/her work (when not asked) (OCBI)	.67			
Passes along information to co-workers (OCBI)	.60			
Fulfils responsibilities specified in job description (IRB)		.96		
Performs tasks that are expected of him/her (IRB)		.90		
Adequately completes assigned duties (IRB)		.89		
Meets formal performance requirements of the job (IRB)		.86		
Engages in activities directly affecting performance evaluation (IRB)		.62		
Takes undeserved work breaks (CWB)			.89	
Great deal of time spent with personal phone conversations (CWB)			.85	
Fails to perform essential duties (CWB)			.84	
Complains about insignificant things at work (CWB)			.82	
Neglects aspects of the job that he/she is not obliged to perform (CWB)			.63	
Conserves and protects organisational property (OCBO)				.59
Adheres to informal rules to maintain order (OCBO)				.58
Gives advance notice when unable to come to work (OCBO)				.46
Attendance at work is above the norm (OCBO)				.45

3.5.2.3 Engagement Items Factor Analysis

For the behavioural items, I conducted an exploratory factor analysis of all variables, again using principal factor analysis with a Promax rotation. The items have good fit, with MSA = .97 and no individual variable having an MSA lower than .95.

Analysis of eigenvectors as seen in Table 3.6 shows that two eigenvalues provide explanatory power of 98%, with the second factor providing 6% of variance. Thereafter, added factors provide little value. The scree plot also suggests that two factors are appropriate.

Table 3.6: Table of Eigenvalues for Engagement Items

	Eigenvalue	Difference	Proportion	Cumulative
1	4188.49	3908.99	.91	.91
2	279.51	191.10	.06	.98
3	88.41	10.22	.02	.99
4	78.18	33.73	.02	1.01
5	44.45	9.35	.01	1.02
6	35.10	11.06	.01	1.03
7	24.04	8.11	.01	1.03
8	15.93	14.63	.00	1.04
9	1.30	5.51	.00	1.04
10	-4.21	4.25	.00	1.04
11	-8.46	2.31	.00	1.03
12	-10.78	5.74	.00	1.03
13	-16.52	3.42	.00	1.03
14	-19.94	1.25	.00	1.02
15	-21.19	3.30	.00	1.02
16	-24.49	3.70	-.01	1.01
17	-28.20	10.67	-.01	1.01
18	-38.87		-.01	1.00

Note: Eigenvalues of the Reduced Covariance Matrix: Total = 4582.73063 Average = 254.596146

Table 3.7 below shows the rotated factor loadings for the two factor solution. As seen there, all emotional items factor together, but Factor 1 includes all physical and cognitive items in one set.

Table 3.7: Rotated Factor Pattern Loadings of Engagement Items

	Factor1	Factor2
I exert my full effort to my job (Physical)	.57	
At work, I pay a lot of attention to my job (Cognitive)	.56	
At work, I focus a great deal of attention on my job (Cognitive)	.55	
At work, I devote a lot of attention to my job (Cognitive)	.54	
I exert a lot of energy on my job (Physical)	.54	
I devote a lot of energy to my job (Physical)	.51	
At work, I concentrate on my job (Cognitive)	.51	
I strive as hard as I can to complete my job (Physical)	.50	
At work, my mind is focused on my job (Cognitive)	.49	
I try my hardest to perform well on my job (Physical)	.48	
I work with intensity on my job (Physical)	.47	
At work, I am absorbed by my job (Cognitive)	.40	
I feel positive about my job (Emotional)		.61
I am excited about my job (Emotional)		.59
I am proud of my job (Emotional)		.55
I am interested in my job (Emotional)		.52
I feel energetic at my job (Emotional)		.42
I am enthusiastic in my job (Emotional)		.39

For both the above factor analysis, the correlation Table 4-2 below shows the Cronbach alphas on the diagonals, all alphas indicate acceptable reliability.

A further analysis of three factors has difficult to interpret factors. Accordingly, the two-factor solution is retained. Factor 1 will be designated “Non-Emotional Engagement”.

3.5.2.4 Factor Aggregation

Accordingly, aggregated variables are created from these factors. I use averages of factor items instead of factor scores, to retain the original scaling of variables

3.6 Data analysis and interpretation

The data were first cleaned and missing data assessed. It was then analysed with descriptive statistics. This statistical process forms the basis of most quantitative analysis. It allows data to be viewed at an elementary level, making it understandable. It allows us to group data and understand the measures of spread. Factor analysis was completed to define the extent to which variables represent constructs. Factor analysis guided us in terms of finding clusters of related variables. These clusters are variables which are highly correlated compared to those outside the cluster. Factor analysis allows multiple measurements to be analysed by determining causes of a relationship bet measures. Cronbach alphas were used on multi item scales to ascertain internal reliability. Correlations were assessed. Regression was run and assessed for fit and the slopes analysed. The R^2 values and ANOVA F-Stats were then analysed. Moderation was assessed using the classic Baron and Kenny (1986) method. Moderation expresses the processes behind relationships (Lee, 2013), multiple regressions using SAS.

The analysis assessed the impact of age, tenure and engagements as moderators to the relationship between performance and training transfer.

3.7 Limitations of the study

- Quantitative research does not elaborate on underlying reasons for certain responses from observations. This study is part of the social interaction and therefore human perception and situational context is unaccounted for.
- The outcomes of the research has limitations because the questions did not interrogate the organisational climate at the time the survey was conducted.
- The sample may be questioned as not being representative of the population.
- The answers of the employee completed survey may have been conducted under duress and may advance issues of data validity.
- The applicability of the results to other parts of South Africa may be questioned as the climate in work environments related to reward etc. may be different across different Provinces. This is as a result of the survey being conducted in Gauteng only.
- There is no opportunity to seek clarity on question in an online survey and hence may lead to misunderstanding.

3.8 Validity and reliability

This study aims to be reliable and consist. A reliable survey instrument is both reliable and consistent (Fink, 1995). According to Campbell (1986) validity refers to the strength of our inference i.e. how close to the truth or falsity of the inference, are we. Existing theory is used to advance accuracy. The questions asked relate to the items that were set out to be measured. Therefore the research methodology used, accurately assesses the key factors affecting training transfer and performance.

3.8.1 External validity

External validity is the extent to which measures appropriately assess the factors it is intended to measure (Fink, 1995). Findings invalid when they cannot be extended to contexts outside that researched population.

This relates to the magnitude to which the results can be generalised outside the current research participants. The sample population included participants across different industries, ages, qualifications and job types across Gauteng, South Africa, and therefore represent the profile of the dynamics within workplaces in South Africa. The diversity of industry types allows the study to be generalised to different work environments. The Reponses from a cross-section of workerswith respect to age, tenure, engagement is a good indication of the demographic profile of employees. The selection of participants was based on a fair degree of randomness and convenience.

The constructs have been well defined and understood. Validity is ensured by using adapted question from existing literature as the basis for the questions tested. The relationship between variables has been demonstrated in past studies. The theoretical model utilised to test the relationships has been well established.

Mono-method bias has been minimised by using multiple measures of key concepts. The social threats to external validity include hypothesis guessing i.e. when respondents base their behaviour on what they think the answer should be.

3.8.2 Internal validity

Internal validity makes reference to the consistency of the data gathering procedure (Golafshani, 2003). Carter and Porter (2000) defined internal validity as the extent to which research study tests the research questions. "Findings can be said to be internally invalid because they may have been affected by factors other than those thought to have caused them, or because the interpretation of the data by the researcher is not clearly supportable" (Seliger &

Shohamy, 1989). Internal validity is assured by adherence to theoretically derived relationships. The research questions have been tested in previous studies and have been found to represent the constructs being tested in this study. We can therefore say with some degree of certainty that the factors studied explain the results. Instrumental bias is mitigated because the survey was conducted online and duplicated to all participants. The scale and structure remained the same throughout the survey process. The sample represented a wide spectrum of industries, therefore mitigating the threat of diffusion.

Threats to reliability include:

i) Candidates can only be asked to answer the questions honestly but the level of honesty cannot be determined.
ii) Candidates who display negativity towards completing the questionnaire where given the option to opt out i.e. their participation are voluntary.
iii) Reactivity measurement results when respondents feel that the questionnaire is a test. Assurance that the survey is to assess the workplace innovation climate, training, transfer, engagement and performance only are given to all participants.

3.8.3 Reliability

Trochim (2000) suggested that reliability is the degree to which the same result will be obtained when reassessed. To ensure reliability the sample size was large. Further reliability tests will be conducted during the statistical process to test the reliability of the sample. Cronbach alphas were used to check reliability from multi item scales. Cronbach alpha's determine how well multiple items measure a single construct. By using Cronbach alphas with deleted variables we are able to determine if the reliability improves when certain variables are deleted. This is preferred over retest due to the time constraints and also the logistical process of doing a retest of the same sample. A reliable survey is one that is absent of measurement errors (Fink, 1995). The online questionnaire provided the same questions to participants mitigating discrepancy. The data gathering procedure is duplicated for all participants and improves reliability.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

As seen in Table 4.1, the major sets of results to be reported include correlation analysis and regression of all major predictors on each behavioural outcome (for the simple associational hypotheses). For the moderation analysis, the classic analysis of interaction as submitted by Baron and Kenny (1986) was used. There are many moderations to be estimated given the four dependent variables (IRB, OCBI, OCBO and CWB), three focal independent variables (training transfer and two types of engagement) and two moderators (age and tenure). Therefore, all combinations were assessed and only those with at least some possible moderation as evidenced in interaction effects or the graph are reported.

Table 4.1: Hypotheses and Associated Tests

Hypothesis	**Associated Analysis**
$\mathbf{H_1}$: Training transfer is positively associated with **a)** in-role behaviours, **b)** individual-focussed OCBs, and **c)** organization-focussed OCBs; and **d)** negatively associated with counter-productive workplace behaviours.	Correlation analysis Linear regression analysis
$\mathbf{H_2}$: Employee engagement is positively associated with **a)** in-role behaviours, **b)** individual-focussed OCBs, and **c)** organization-focussed OCBs; and **d)** negatively associated with counter-productive workplace behaviours.	Correlation analysis Linear regression analysis
$\mathbf{H_{3a}}$: Age moderates the relationships between training transfer and employee behaviours such that younger employees will have stronger relationships.	Classic Baron & Kenny (1986) moderation analysis
$\mathbf{H_{3b}}$: Age moderates the relationships between engagement and employee behaviours such that younger employees will have stronger relationships.	Classic Baron & Kenny (1986) moderation analysis

H_{4a}: Tenure moderates the relationships between training transfer and employee behaviours such that newer employees will have weaker relationships.	Classic Baron & Kenny (1986) moderation analysis
H_{4b}: Tenure moderates the relationships between engagement and employee behaviours such that newer employees will have weaker relationships.	Classic Baron & Kenny (1986) moderation analysis

4.2 Correlation Analysis

Table 4.2 below gives the correlations and descriptive statistics of major variables. As seen there, there are moderate to strong positive and statistically significant correlations between training transfer and IRB (r = .64, p < .001), OCBI (r = .47, p < .001) and OCBO (r = .40, p < .001), and a modest but significant association with CWB IRB (r = -.23, p < .001), providing support for H_1.

In addition, non-emotional engagement has modest and significant positive correlations with IRB, OCBI and OCBO (r = .25, .23 and .17 respectively, p < .001), but a weak correlation with CWB. Emotional engagement has very similar results. This provides support for H2a, b and c.

Table 4.2 : Correlations and Descriptive Statistics

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. IRB	(.94)															
2. OCBI	.58***	(.91)														
3. OCBO	.57***	.54***	(.73)													
4. CWB	-.27***	-.18***	-.21***	(.90)												
5. Non-emotional engagement	.25***	.23***	.17***	-.06	(.97)											
6. Emotional engagement	.22***	.19***	.19***	-.04	.83***	(.95)										
7. Training Transfer	.64***	.47***	.40***	-.23***	.19***	.18***	(.95)									
8. Male	-.12***	-.14***	-.08*	.08**	-.04	-.01	-.13***	1.00								
9. School	.04	.10**	.02	-.03	.11***	.08*	.05	-.06	1.00							
10. Higher	.09**	.05	.10**	-.08*	-.10***	-.09**	.09**	.07*	-.31***	1.00						
11. Tech	.00	-.06	-.02	.03	-.07*	-.06	-.00	.16***	-.07*	-.01	1.00					
12. Mid	.06	.06	.02	-.02	.07*	.05	-.02	.02	-.06	.07*	-.56***	1.00				
13. Senior	-.02	.07*	.04	.06	-.00	.06	.02	.05	.02	.05	-.13***	-.20***	1.00			
14. Age	-.02	.05	.04	-.13***	-.04	-.05	.07*	-.07*	-.01	.05	-.00	-.03	-.00	1.00		
15. Tenure	-.02	-.02	-.02	.12***	.04	.05	-.03	.04	.05	-.09**	-.05	.02	.06	.02	1.00	
16. Training Levels	.20***	.14***	.16***	-.09**	.28***	.32***	.16***	-.06	.07*	-.03	-.09**	.05	-.02	.04	-.03	1.00
M	80.76	68.84	79.03	32.10	81.43	79.00	73.92	.46	.15	.36	.27	.47	.04	38.15	3.27	52.27
SD	12.55	19.53	15.32	26.88	14.70	18.22	17.27	.50	.36	.48	.44	.50	.21	6.95	2.92	21.47

*Notes: M = Variable mean, SD = standard deviation, *** = p < .01, ** = p < .05, * = p < .10. Cronbach alphas on diagonals in parentheses.*

4.3 Results pertaining to Hypothesis 1a and 2a

Main Regression on in-role behaviours

Table 4.3 below gives the main effects regression results on in role behaviours (IRB).

Table 4.3: Main effects regression on IRB

	Parameters		Statistical Significance		
Variable	**B**	**β**	**SE**	**p**	**95% interval**
Intercept	41.90***		3.41	.000	35.19 to 48.60
Male	-1.39*	-.06	.8	.080	-2.96 to .17
School	.46	.01	1.14	.687	-1.77 to 2.69
Higher	1.07	.04	.85	.212	-.61 to 2.74
Tech	2.44**	.09	1.13	.031	.23 to 4.66
Mid	2.46**	.10	1	.014	.50 to 4.42
Senior	.05	8.00E-04	1.99	.981	-3.87 to 3.97
Age	-.12**	-.07	.06	.029	-.23 to -.01
Job Tenure	-.02	-4.00E-03	.13	.901	-.27 to .24
Training Amount	.06***	.10	.02	.003	.02 to .09
Emotional Engagement	-.01	-.02	.04	.723	-.09 to .06
Non Emotional Engagement	.10**	.11	.05	.040	47E-3 to .19
Transfer	.43***	.60	.02	.000	.39 to .48
F			40.20***		
R^2			.44		
Adj R^2			.43		

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10.*

As seen in Table 4.3, the model has overall R^2 of .44, and significant ANOVA F. The size of the R^2 is discussed in the discussion section.

Training transfer has a moderate, positive association with IRB (β = .60, p < .001). Although non-emotional engagement has a statistically significant effect (β = .11, p < .05), this is a weak effect in magnitude. There are few other effects of any size. Therefore, there is support for H1a but not for H2a.

4.4 Results pertaining to Hypothesis 1b and 2b

Main Regression on individual-focussed citizenship (OCBI)

Table 4.4 below gives the main effects regression results on individual-focussed citizenship (OCBI).

Table 4.4: Main effects regression on OCBI

	Parameters		Statistical Significance		
Variable	**B**	**β**	**SE**	**p**	**95% interval**
Intercept	14.61**		6.09	0.017	2.65 to 26.57
Male	-3.44**	-0.09	1.42	0.016	-6.22 to -0.65
School	4.06**	0.07	2.03	0.046	0.07 to 8.05
Higher	1.55	0.04	1.52	0.31	-1.45 to 4.54
Tech	1.83	0.04	2.01	0.363	-2.12 to 5.78
Mid	3.92**	0.1	1.78	0.028	0.41 to 7.42
Senior	8.83**	0.09	3.56	0.013	1.84 to 15.82
Age	0.04	0.01	0.1	0.682	-0.15 to 0.23
Job Tenure	-0.11	-0.02	0.23	0.642	-0.57 to 0.35
Training Amount	0.04	0.04	0.03	0.239	-0.03 to 0.11
Emotional Engagement	-0.05	-0.04	0.07	0.497	-0.18 to 0.09
Non Emotional Engagement	0.21**	0.16	0.08	0.012	0.05 to 0.38
Transfer	0.47***	0.42	0.04	0	0.39 to 0.55
F			18.11***		
R^2			.26		
Adj R^2			.25		

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10.*

Here, the R^2 is lower in magnitude than for IRB, at .26, and ANOVA F remains significant. These results are again discussed in the next chapter.

Similar to the above, training transfer has the strongest effect, with a moderate, positive association with OCBI (β = .42, p < .001). Here, non-emotional engagement has a modest and statistically significant effect (β = .16, p < .05). There are few other effects of any size. Therefore, there is support for H1b and for H2b for non-emotional engagement only.

4.5 Results pertaining to Hypothesis 1c and 2c

Main Regression on organization-focussed citizenship (OCBO)

Table 4.5 below gives the main effects regression results on organization-focussed citizenship (OCBO).

Table 4.5: Main effects regression on OCBO

	Parameters		Statistical Significance		
Variable	**B**	**β**	**SE**	**p**	**95% interval**
Intercept	44.67***		5.03	0	34.78 to 54.55
Male	-1.29	-0.04	1.17	0.273	-3.59 to 1.02
School	0.81	0.02	1.68	0.629	-2.48 to 4.11
Higher	2.41*	0.08	1.26	0.056	-0.06 to 4.88
Tech	1.46	0.04	1.66	0.379	-1.80 to 4.73
Mid	1.48	0.05	1.47	0.316	-1.41 to 4.37
Senior	3.44	0.05	2.94	0.242	-2.33 to 9.22
Age	0.02	0.01	0.08	0.849	-0.14 to 0.17
Job Tenure	-0.03	-5.00E-03	0.19	0.894	-0.41 to 0.35
Training Amount	0.06**	0.08	0.03	0.033	0.01 to 0.12
Emotional Engagement	0.10*	0.12	0.06	0.07	-0.01 to 0.21
Non Emotional Engagement	-0.03	-0.02	0.07	0.718	-0.16 to 0.11
Transfer	0.31***	0.35	0.03	0	0.24 to 0.38
F			11.62***		
R^2			.19		
Adj R^2			.17		

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10.*

Here, the R^2 is lower in magnitude than for the previous two outcomes, at .19, although ANOVA F remains significant. These results are again discussed in the next chapter.

As seen in Table 4.5, training transfer has the strongest effect, at β = .35 (p < .001) with OCBO. Emotional engagement has a statistically significant but small effect (β = .12, p < .05), this is a weak effect in magnitude. There are few other effects of any size. Therefore, there is support for H1c but not a great deal for H2c.

4.6 Results pertaining to Hypothesis 1d and 2d

Main Regression on counterproductive workplace behaviours (CWB)

Table 4.6 below gives the main effects regression results on counter-productive workplace behaviours (CWB).

Table 4.6: Main effects regression on CWB

	Parameters		Statistical Significance		
Variable	**B**	**β**	**SE**	**p**	**95% interval**
Intercept	72.60***		9.36	0	54.21 to 90.99
Male	1.92	0.04	2.19	0.38	-2.38 to 6.21
School	-2.47	-0.03	3.14	0.431	-8.63 to 3.69
Higher	-3.62	-0.06	2.35	0.124	-8.23 to 0.99
Tech	1.67	0.03	3.1	0.589	-4.41 to 7.76
Mid	0.43	0.01	2.74	0.876	-4.96 to 5.82
Senior	7.56	0.06	5.47	0.168	-3.19 to 18.30
Age	-0.43***	-0.11	0.15	0.005	-0.73 to -0.13
Job Tenure	0.94***	0.10	0.36	0.009	0.23 to 1.65
Training Amount	-0.05	-0.04	0.05	0.355	-0.15 to 0.05
Emotional Engagement	0.03	0.02	0.11	0.771	-0.18 to 0.24
Non Emotional Engagement	-0.07	-0.04	0.13	0.595	-0.32 to 0.19
Transfer	-0.29***	-0.19	0.06	.00	-0.42 to -0.17
F			4.69***		
R^2			.08		
Adj R^2			.07		

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10.*

Here, the R^2 is even lower in magnitude than for the previous two outcomes, at .08, although ANOVA F remains significant. These results are again discussed in the next chapter.

As seen in Table 4.6, training transfer has a modest, negative association with CWB (β = -.19, p < .001). There are few other effects of any size. Therefore, there is some limited support for H1d but not for H2d.

4.7 Results pertaining to Hypothesis 3

Moderations of Age on Training Transfer – IRB Relationship

The first moderation in this set is that of age on the relationship between training transfer and in-role behaviours. Table 4.7 shows the results of the base models and interaction model.

Table 4.7: Moderation of Age on the Training Transfer-IRB Relationship

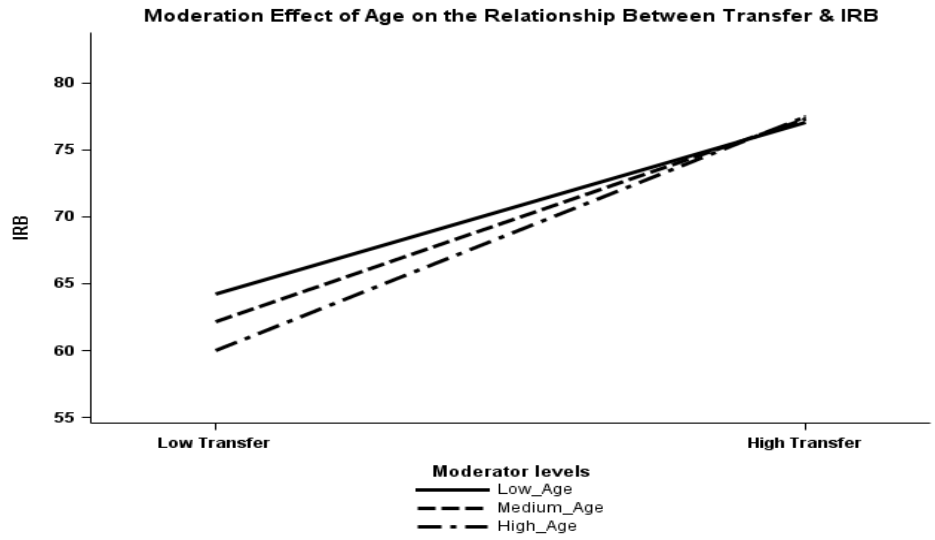
	Base 1		Model 2		Model 3	
	B	β	B	β	B	β
Intercept	68.52***		68.72***		69.01***	
Male	-1.19	-.05	-1.29	-.05	-1.4*	-.06
School	.23	.01	.22	.01	.1	.00
Higher	1.11	.04	1.19	.05	1.02	.04
Tech	2.49**	.09	2.46**	.09	2.46**	.09
Mid	2.39**	.10	2.3**	.09	2.03**	.08
Senior	-.22	-.00	-.26	-.00	-.32	-.01
OrgTenure	.11	.04	.12	.04	.11	.04
Training Amount	.06***	.09	.06***	.10	.05***	.09
Emotional Engagement	-.01	-.01	-.01	-.02	-.02	-.02
Non Emotional Engagement	.10**	.11	.10**	.11	.10**	.12
Transfer	.43***	.60	.44***	.60	.44***	.61
Age			-.12**	-.07	-.14**	-.08
Transfer x Age					.01***	.09
R^2	.44		.44		.45	
AdjR^2	.43		.43		.44	
PC	.58		.58		.57	
AIC	2810.31		2807.16		2799.75	
SBC	2863.50		2864.79		2861.82	
BIC	2812.78		2809.72		2802.40	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.7, the interaction is statistically significant at p < .001 (*β* = .09), and its addition leads to lower information criteria including PC, AIC, SBC and BIC.

Accordingly, Figure 4.1 below shows the results graphically. As can be seen there, older employees have a somewhat stronger positive relationship between transfer and IRB than younger staff. This contradicts Hypothesis 3(a).

Figure 4.1: Moderation of age on the training transfer-IRB relationships



Moderations of Age on Training Transfer – Counterproductive workplace behaviours

The second moderation in this set is that of age on the relationship between training transfer and counterproductive workplace behaviours (CWB). Table 4-8 shows the results of the base models and interaction model.

Table 4.8: Moderation of Age on the Training Transfer-CWB Relationship

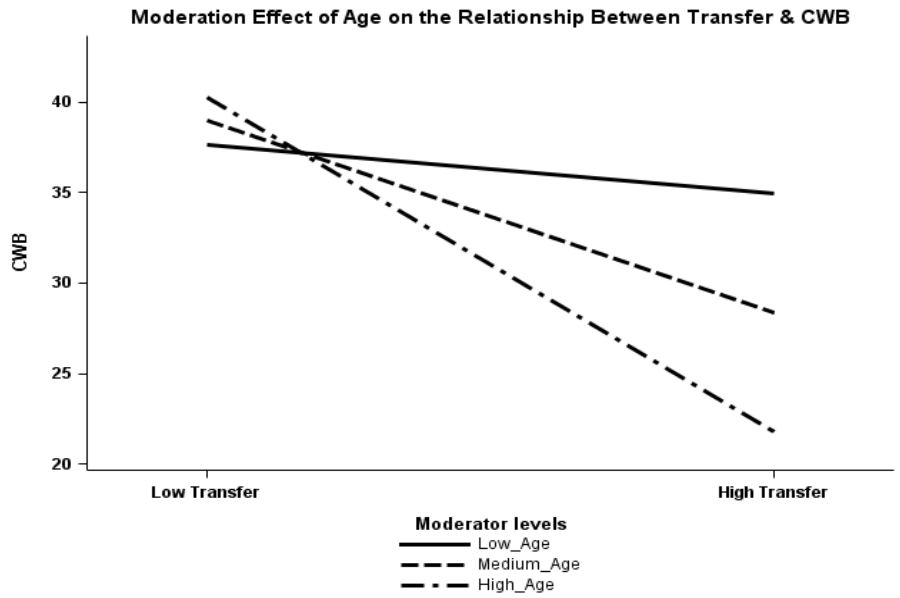
	Base 1		Model 2		Model 3	
	B	β	B	β	B	β
Intercept	33.54***		34.26***		33.39***	
Male	3.02	.06	2.71	.05	3.13	.06
School	-3.55	-.05	-3.56	-.05	-3.1	-.04
Higher	-3.8	-.07	-3.54	-.06	-3	-.05
Tech	1.57	.03	1.49	.02	1.52	.03
Mid	.00	-.00	-.30	-.01	.67	.01
Senior	6.88	.05	6.74	.05	6.91	.05
OrgTenure	.59**	.10	.61***	.11	.64***	.11
Training Amount	-.06	-.05	-.05	-.04	-.04	-.03
Emotional Engagement	.06	.04	.05	.03	.06	.04
Non Emotional Engagement	-.08	-.04	-.08	-.04	-.09	-.05
Transfer	-.3***	-.19	-.29***	-.19	-.3***	-.19
Age			-.43***	-.11	-.38**	-.10
Transfer x Age					-.03***	-.15
R^2	.07		.09		.11	
$ADJR^2$	.06		.07		.09	
PC	.96		.95		.94	
AIC	4050.65		4044.64		4032.56	
SBC	4103.79		4102.21		4094.55	
BIC	4053.12		4047.20		4035.20	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.8, the interaction is significant (β = .15, p < .001), and its addition leads to lower information criteria including PC, AIC, SBC and BIC.

Accordingly, Figure 4.2 below shows the results graphically. As can be seen there, older employees have a stronger negative relationship between transfer and IRB than younger staff. This contradicts Hypothesis 3(a).

Figure 4.2: Moderation of age on the training transfer-CWB relationships



Moderation effects of Age on Emotional-Engagement Behaviour Relationships

The first substantial moderation in this set is that of age on the relationship between emotional engagement and individual citizenship. Table 4.9 shows the results of the models.

Table 4.9: Moderation of Age on the Emotional Engagement – OCBI Relationship

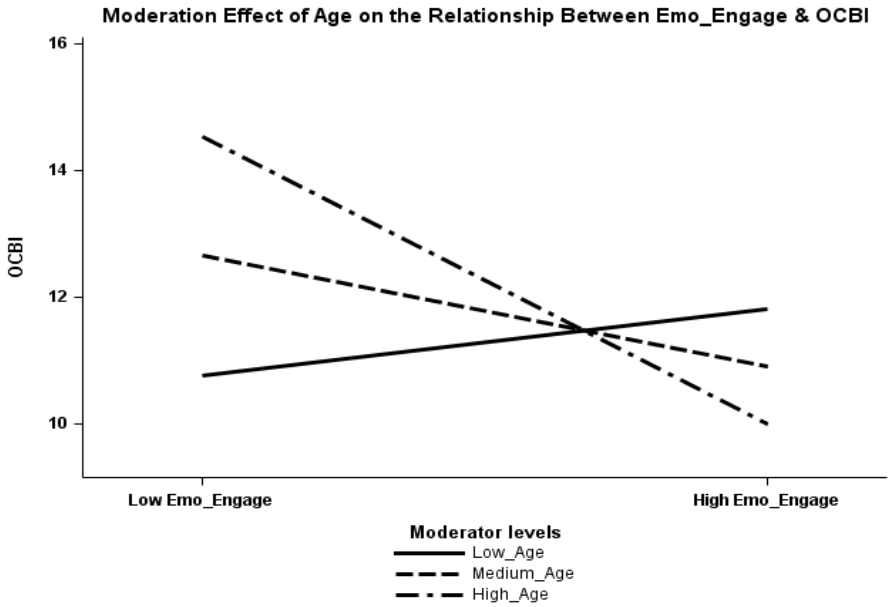
	Base 1		Model 2		Model 3	
	B	β	B	β	B	β
Intercept	12.37		12.47		11.77	
Male	-3.47**	-.09	-3.44**	-.09	-3.43**	-.09
School	4.06**	.07	4.06**	.07	4.25**	.08
Higher	1.57	.04	1.55	.04	1.55	.04
Tech	1.82	.04	1.83	.04	1.95	.04
Mid	3.89**	.10	3.92**	.10	4.32**	.11
Senior	8.82**	.09	8.83**	.09	9.13**	.10
Job Tenure	-.11	-.02	-.11	-.02	-.12	-.02
Training Amount	.04	.04	.04	.04	.04	.04
Transfer	.47***	.42	.47***	.42	.47***	.42
Non Emotional Engagement	.21**	.16	.21**	.16	.22***	.17
Emotional Engagement	-.05	-.04	-.05	-.04	-.05	-.04
Age			.04	.01	.07	.03
Emotional Engagement x Age					-.01*	-.07
R^2	.26		.26		.27	
ADJR^2	.25		.25		.25	
PC	.77		.77		.77	
AIC	3527.77		3529.59		3528.18	
SBC	3580.96		3587.22		3590.24	
BIC	3530.24		3532.15		3530.83	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.9, the interaction is statistically significant at p < .001 (*β* = -.07). Its addition leads to lower information criteria only for AIC and BIC, so the addition may be debatable.

Accordingly, Figure 4.3 below shows the results graphically. As can be seen there, older employees have a negative relationship between emotional engagement and OCBI with the relationship tending towards zero as employees get younger and possibly becoming positive for young employees. This supports Hypothesis 3(b).

Figure 4.3: Moderation of age on the Emotional Engagement - IRB relationships



Moderations of Age on Emotional Engagement – Organisational citizenship (OCBO)

The second substantial moderation in this set is that of age on the relationship between emotional engagement and organisational citizenship (OCBO). Table 4.10 shows the results of the models.

Table 4.10: Moderation of Age on the Emotional Engagement – OCBO Relationship

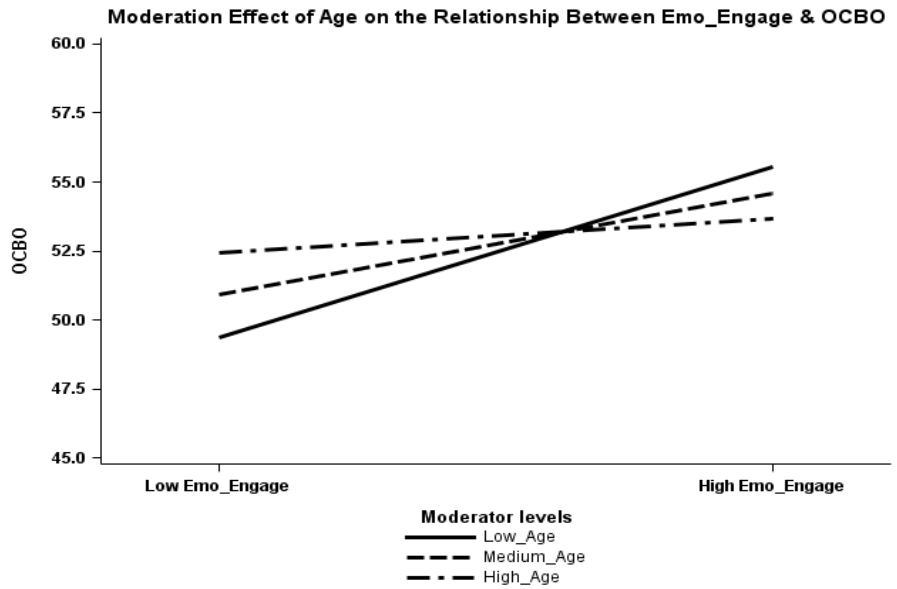
	Base 1		Model 2		Model 3	
	B	β	B	β	B	β
Intercept	53.34***		53.38***		52.75***	
Male	-1.30	-.04	-1.29	-.04	-1.28	-.04
School	.81	.02	.81	.02	.98	.02
Higher	2.42*	.08	2.41*	.08	2.41*	.08
Tech	1.46	.04	1.46	.04	1.57	.05
Mid	1.47	.05	1.48	.05	1.84	.06
Senior	3.44	.05	3.44	.05	3.71	.05
Job Tenure	-.02	.00	-.03	.00	-.03	-.01
Training Amount	.06**	.08	.06**	.08	.06**	.08
Transfer	.31***	.35	.31***	.35	.31***	.35
Non Emotional Engagement	-.03	-.02	-.03	-.02	-.02	-.02
Emotional Engagement	.10*	.12	.10*	.12	.10*	.12
Age			.02	.01	.04	.02
Emotional Engagement x Age					-.01**	-.07
R^2	.19		.19		.19	
$ADJR^2$	.17		.17		.17	
PC	.85		.85		.85	
AIC	3290.25		3292.22		3290.26	
SBC	3343.45		3349.84		3352.32	
BIC	3292.72		3294.77		3292.9	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.10, the interaction is statistically significant at p < .001 (β = -.07), and its addition leads to lower information criteria only in the case of AIC and BIC.

Accordingly, Figure 4.4 below shows the results graphically. As can be seen there, younger employees have a somewhat positive relationship between emotional engagement and OCBO whereas older staff has no relationship – this may explain the poor overall effect in the main regression. This supports Hypothesis 3(b).

Figure 4.4: Moderation of age on the Emotional Engagement - IRB relationships



Moderation effects of Age on Non-Emotional - Engagement OCBI

The first substantial moderation in this set is that of age on the relationship between non-emotional engagement and OCBI. Table 4.11 shows the results of the models.

Table 4.11: Moderation of Age on the Non-Emotional Engagement - OCBI Relationship

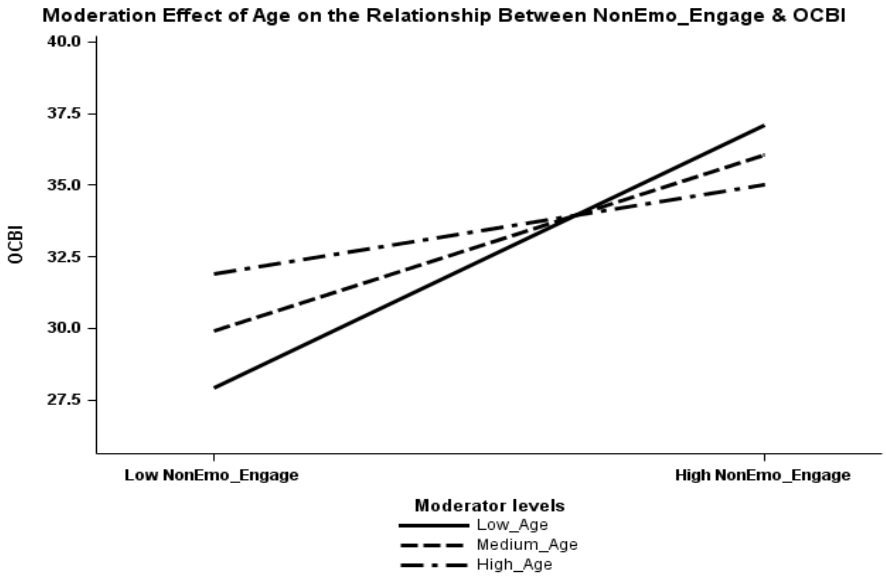
	Base 1		Model 2		Model 3	
	B	β	B	β	B	β
Intercept	33.47***		33.48***		32.99***	
Male	-3.47**	-.09	-3.44**	-.09	-3.39**	-.09
School	4.06**	.07	4.06**	.07	4.36**	.08
Higher	1.57	.04	1.55	.04	1.48	.04
Tech	1.82	.04	1.83	.04	1.87	.04
Mid	3.89**	.10	3.92**	.10	4.19**	.11
Senior	8.82**	.09	8.83**	.09	9.27***	.10
Job Tenure	-.11	-.02	-.11	-.02	-.13	-.02
Training Amount	.04	.04	.04	.04	.04	.04
Transfer	.47***	.42	.47***	.42	.47***	.42
Emotional Engagement	-.05	-.04	-.05	-.04	-.04	-.04
Non-Emotional Engagement	.21**	.16	.21**	.16	.21**	.16
Age			.04	.01	.07	.02
Non-Emotional Engagement x Age					-.01**	-.07
R^2	.26		.26		.27	
ADJR^2	.25		.25		.25	
PC	.77		.77		.77	
AIC	3527.77		3529.59		3527.63	
SBC	3580.96		3587.22		3589.69	
BIC	3530.24		3532.15		3530.27	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.11, the interaction is statistically significant at p < .001 (β = -.07), and its addition leads to lower AIC and BIC.

Accordingly, Figure 4.5 below shows the results graphically. As can be seen there, younger employees have a somewhat stronger positive relationship between non-emotional engagement and OCBI than older staff. This supports Hypothesis 3(b)

Figure 4.5: Moderation of age on the training transfer - IRB relationships



No other moderation shows any noticeable effect.

4.8 Results pertaining to Hypothesis 4

Moderations of Tenure on Transfer - Behaviour Relationships

The only substantial moderation in this set is that of tenure on the relationship between training transfer and CWB. Table 4.12 shows the results of the models.

Table 4.12: Moderation of Tenure on the Training Transfer - CWB Relationship

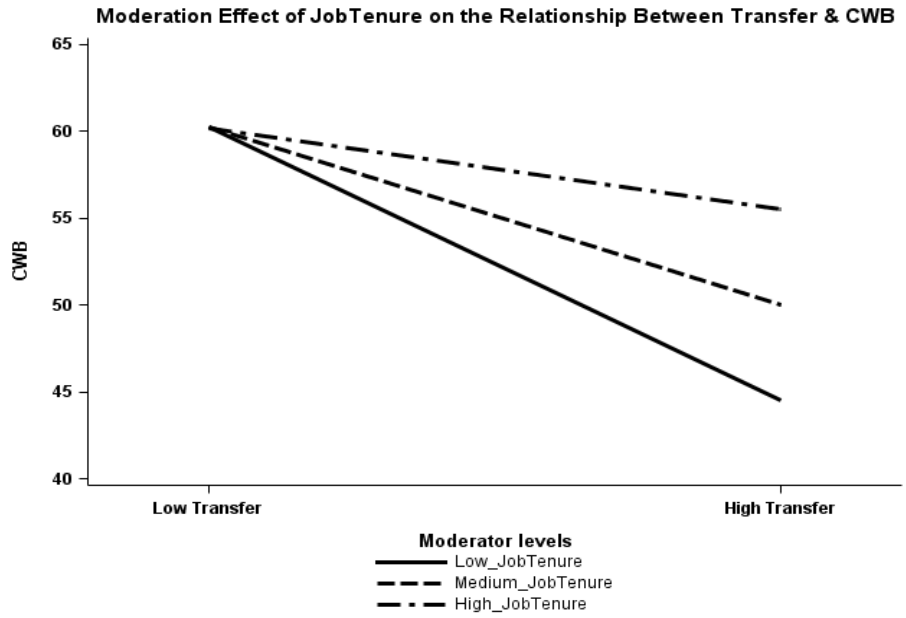
	Base 1		Model 2		Model 3	
	B	**β**	**B**	**β**	**B**	**β**
Intercept	53.18***		54***		55.13***	
Male	2.16	.04	1.92	.04	2.09	.04
School	-2.32	-.03	-2.47	-.03	-2.65	-.04
Higher	-4.17*	-.07	-3.62	-.06	-3.34	-.06
Tech	1.45	.02	1.67	.03	1.59	.03
Mid	.51	.01	.43	.01	.58	.01
Senior	8.27	.06	7.56	.06	7.35	.06
Age	-.41***	-.11	-.43***	-.11	-.45***	-.12
Training Amount	-.05	-.04	-.05	-.04	-.05	-.04
Emotional Engagement	.04	.03	.03	.02	.02	.02
Non Emotional Engagement	-.07	-.04	-.07	-.04	-.07	-.04
Transfer	-.3***	-.19	-.29***	-.19	-.3***	-.19
Job Tenure			.94***	.10	.93***	.10
Transfer x Job Tenure					.05**	.10
R^2	.07		.08		.09	
ADJR^2	.06		.07		.07	
PC	.96		.95		.95	
AIC	4049.74		4044.82		4040.67	
SBC	4102.88		4102.39		4102.66	
BIC	4052.21		4047.38		4043.31	

*Notes: B = unstandardized parameters, β = standardized parameters, *** = p < .01, ** = p < .05, * = p < .10. PC = prediction criterion, AIC = Akaike's Information Criterion, SBC = Schwartz's Bayesian Criterion, BIC = Bayesian information criterion.*

As seen in Table 4.12, the interaction is statistically significant at p < .001 (β = .10), and its addition leads to lower information criteria including AIC, SBC and BIC.

Accordingly, Figure 4.13 below shows the results graphically. As can be seen there, newer employees have a stronger negative relationship between transfer and CWB than longer-serving staff. This contradicts Hypothesis 4(a).

Figure 4.6: Moderation of Tenure on the training transfer - CWB relationship



4.9 Summary of the results

The first sub problem was to assess the association between training transfer and in-role behaviours, organisational citizen behaviours and counterproductive workplace behaviours. The second sub problem is to assess the association between employee engagement and in role behaviour, organisational citizenship behaviour and counterproductive work behaviours. The third sub-problem is to assess the extent to which age affects these relationships. The fourth sub-problem is to examine the impact of tenure on these relationships. Table 4.13 below summarises the results of the findings from the hypotheses analysed.

Table 4.13: Summary of the results

	Hypothesis	Outcome
H1a	Training transfer is positively associated to in-role behaviours.	This hypothesis was supported
H1b	Training transfer is positively related to individual focused organisational citizenship behaviour.	This hypothesis was supported
H1c	Training transfer is positively related to organisation - focussed organisational citizenship behaviour.	This hypothesis was supported
H1d	Training transfer is negatively related to counterproductive work behaviour.	This hypothesis was supported
H2a	Employee engagement is positively associated with in-role behaviours.	This hypothesis was supported
H2b	Employee engagement is positively associated with individual-focussed organisation citizenship behaviours	This hypothesis was supported
H2c	Employee engagement is positively associated with organisation-focussed organisation citizenship behaviours.	This hypothesis was supported
H2d	Employee engagement is negatively associated with counterproductive work behaviour.	This hypothesis was not fully supported
H3a	Employee age moderates the relationship between training transfer and employee behaviours such that younger employees will have a stronger relationship.	This hypothesis was not supported
H3b	Employee age moderates the relationship between engagement and employee behaviours such that younger employees will have a stronger relationship.	This hypothesis was supported
H4a	Employee tenure moderates the relationship between training transfer and employee behaviours such that newer employees will have a weaker relationship.	This hypothesis was not supported
H4b	Employee tenure moderates the relationship between engagement and employee behaviours such that newer employees will have a weaker relationship	No effect of any size was obtained for this hypothesis from the moderation regression analysis.

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

The purpose of this research is to determine the effect of age, tenure and employee engagement on training transfer and employee behaviours i.e. OCB-O, OCB-I, CWB and IRB as well as inspect the moderating consequence of employee age and tenure on these relationships. The research problem is investigated largely using the Baldwin and Ford's (1988) model for training transfer and Kahn's (1990) proposition on employee engagement. The research findings attempt to establish the relationships between OCB-I, OCB-O, IRB and CWB as explained by training transfer and employee engagement and the impact of the age and tenure on these relationships.

The discussion section outlines the following:

- The models and impact of training transfer and engagement on OCB-O, OCB-I, IRB and CWB.
- The moderation effect of age and tenure on the relationships above.
- The various hypotheses outlined and reviewed.

Training Transfer

The models used to examine the connection between training transfer and worker behaviour is that proposed by Baldwin and Ford (1988). Therefore, understanding the influencing factors under which training transfer occurs and the trainee characteristics that contribute towards effective training transfer is important. If training is transferred and generalised to the work place it shows that certain types of behaviours are being displayed by these individuals. By identifying this, organisations may be able to develop action plans to improve behaviour towards increasing organisational performance.

Employee Engagement

Employee engagement is defined as the level at which a worker is involved in the output of his role (Saks, 2006). Kahn (1990) suggested that workers must be intellectually, physically and enthusiastically engaged for them to thrive at work. Therefore, employee engagement positively influences employee work and extra role behaviours. The opposite is also true i.e. if an employee feels that there is no psychological connection or that it is broken the behaviour may also change. It is therefore important to investigate this aspect of employee engagement and how it associates with employee behaviours.

In-role behaviours

In role behaviour was defined by Katz et al. (1964) as expected behaviour of an employee at the work place. This model investigated the association of training transfer and employee engagement with IRB. The model found the R^2 statistic of in-role behaviours is moderate (.44), indicating that the the exists a relatively good fit that it may explain the data.

Employee behaviours (OCB and CWB)

Organisation citizenship behaviour (OCB) is described as “behaviour that is discretionary, not directly or explicitly recognised by the formal reward system and in the aggregate promotes the efficient and effective functioning of the organisation.” (Williams and Anderson, 1991). The social exchange and reciprocity theory may be used to explain OCB behaviour, which suggests that goodwill is exchanged between parties (Hopkins, 2002). Counterproductive work behaviours may be carried out by individuals intended to harm stakeholders, the organisation and its employees (Marcus and Schuler, 2004). Counterproductive work behaviours may have negative consequences for the organisation. This model investigated the relationship between individual – focused OCB and organisation-focused OCB and training transfer and engagement. The model found the R^2 statistic of individual-focussed OCB behaviours, organisation-focused OCB and counterproductive work behaviours is weak (.26), (.20) and (.08) respectively, suggesting that the data only partially explains these model. However all models have significant ANOVA stats.

Moderating effect of Age

As stated earlier all individuals irrespective of their initial abilities may perhaps incur the age-induced changes in mental functioning but this may be limited to certain functions. This may explain the effectiveness of older workers in roles requiring staff motivation and management. Very few investigations were directed using age as a moderator in examining the link between transfer and engagement with employee behaviour. This study has revealed findings that is in line with other research but also goes against some of majority of the literature regarding ageing and employee behaviours.

Moderating effect of Tenure

Tenure leads to organisational experience. As explained earlier through organisational experience employees become familiar with the values, behaviours and customs within an organisation. The controlling effect of tenure on the link between training transfer and engagement and employee behaviours was disappointing because only one effect was found to be significant. This is the effect of tenure on the transfer- CWB relationship. Although it contributes to the existing literature, I was expecting to find a greater effect. There are many reasons for the effect not being found here which include the interpretation of the question on tenure

5.2 Discussion pertaining to Hypothesis 1

Training transfer ⇨ Performance behaviours

The first sub problem is to assess the association between training transfer and employee behaviour which is made up of in-role behaviours, organisational citizen behaviours and counterproductive workplace behaviours. When fitting the data collected for the behaviour items using factor analysis, an acceptable fit was established and four factors were retained.

5.2.1 Hypothesis 1(a)

Training transfer ⇨ IRB

Hypothesis 1(a), states *that training transfer is positively associated to in-role behaviours*. The research findings within the report support this hypothesis. The correlation analysis between training transfer and in-role behaviour (IRB) indicates a strong positive, significant correlation (r= .64 < 0.001). The regression outcomes propose that training transfer has a moderate positive association with IRB (β = 0.6, p<0.001). Human capital theory advocates that there is a cost to investing in human capital and that this may lead to competitive advantage. In this case, the individual goes for training and implements the skills learnt with a view to improving his work performance and hence gain competitive advantage. This advantage may be real i.e. a real improvement in performance or could be a perceived improvement in performance as viewed by the supervisor i.e. the halo effect. Either way it is beneficial to the employee as it improves his image and attitude

Further, as stated before individuals who have a positive job attitude have more motivation to transfer training and improve performance. This may also be explained by the fact that there is a match between the requisite job skills and the incumbent's skills set (Kristoff-Brown et al., 2005). This makes him comfortable to learn and transfer training. This relationship is expected because IRB's are related to individual characteristics of trainees. IRB's indicate a positive work attitude. This result is also in alignment with Schmidt et al.'s (1986) conclusion that trainees who displayed high job involvement are more likely and motivated to learn and implement newly acquired skills. Stewart (1986) supported this by suggesting that trainee characteristics such as engagement, age, self-efficacy and tenure can inform training transfer.

The finding suggests that employees who transfer training to the work place also display in-role behaviours. These employees may enjoy what they do and are familiar with transferring training to the work place. The organisation for which they work may have a conducive climate that allows innovation and change. This in turn improves job performance. They do what is expected of

them in terms of the employment contract and will transfer training which improves the efficiency of their task performance and hence improves overall performance. This finding is consistent with the prevailing literature.

5.2.2 Hypothesis 1(b)

Training transfer ⇨ OCB-I

Hypothesis 1(b), states that *training transfer is positively related to individual focused organisational citizenship behaviour*. The research findings within the report support this hypothesis. The correlation analysis between training transfer and individual-focused OCB indicates a moderate positive correlation ($r = .47$; $p<0.001$). The regression analysis suggests that training transfer has a moderate association with OCB-I ($\beta = 0.42$, $p<0.001$). Therefore the hypothesis is reinforced. This finding is expected and is in agreement with literature. The finding is consistent with Schmidt et al.'s (1986) conclusion that trainees who displayed high job participation were more enthusiastic to learn and implement newly acquired skills. OCB-I is regarded as behaviour to positively influence or help others to the organisations benefit. Bandura (1997) suggested that the belief that one's behaviour will produce a positive outcome also affects the motivation to transfer training. This is also reinforced by Brown and Leigh (1996) who found that a working environment which is seen as psychologically safe and value adding, leads to interest job involvement, commitment and enhances cognitive job satisfaction and motivation.

OCB-I is linked to personal attitudes. A positive attitude increases the chance of OCB-I and hence training transfer. Individuals also use OCB-I to build personal networks by helping specific individuals. These networks then benefit the employee later in their careers and may assist in them performing their tasks better. Therefore an employee who displays OCB-I may be further likely to apply learnt skills to the workplace to help others improve. Any extra role behaviour has an element of reward and engaging in OCB-I and helping other colleagues strengthens the network towards the employees benefit. This research confirms the association between training transfer and OCB-I

behaviour and may give firms an indication of OCB-I behaviour from the extent to which training transfer is generalised towards helping other employees.

5.2.3 Hypothesis 1(c)

Training transfer ⇨ OCB-O

Hypothesis 1(c), states *that training transfer is positively related to organization-focused organisational citizenship behaviour*. The research findings within the report support this hypothesis. The correlation analysis between training transfer and organization-focused OCB indicates a strong positive correlation (r = .40, $p < 0.001$). The regression analysis suggests that training transfer has a moderate association with OCB-I ($\beta = 0.35$, $p< 0.001$). Therefore the hypothesis is supported. This finding is expected and is consistent with literature. George and Brief (1992) acknowledged self-development as an important element of OCB. This infers that individuals who transfer training to the benefit of the organisation will also display OCB-O behaviours. As stated earlier, trainees actively seek out training opportunities and want to learn new skills to increase their contribution to the organisation. Research as indicated before, found that organisational commitment is related to training transfer. OCB-O generally takes place in an organisation that is perceived to be supportive and where the climate for employee development is present. Tracy et al. (1995) confirmed this in studies by finding that transfer of learnt skills and organisational culture influenced post training behaviour.

These results are in line with literature and other findings and mean that the opportunity to transfer the training is influenced by the organisation climate and culture within the firm. The organisation's culture, particularly related to innovation and change, encourages OCB-O – training transfer behaviour. Under such conditions trainees may feel confident to implement newly acquired skills and improve efficiency. The incentive for the trainee is increased organisational performance and also personal gain by establishing themselves as employees who contributed or initiated the enhanced performance. This entrenches them as contributors to success. The opportunity to develop oneself for the ultimate benefit of increasing your contribution towards the organisation manifests in

OCB-O behaviour. Therefore the level of training being transferred gives an indication of the level of employee extra role behaviour displayed.

5.2.3 Hypothesis 1(d)

Training transfer ⇨ CWB

Hypothesis 1(d), states *that training transfer is negatively related to counter-productive work behaviour*. The research findings within the report support this hypothesis. The correlation analysis between training transfer and individual-focused OCB indicates a modest but significant association with CWB (r = -.23, $p < .001$). The regression analysis suggests that training transfer has a modest, negative association with CWB (β = -0.19, $p < .001$). Therefore the hypothesis is somewhat reinforced. This finding is expected and is consistent with literature. As stated before previous research found that trainees committed to the organisation showed more training transfer to their job compared to individuals with counter productive work behaviours. Individuals that believe that the organisation has broken the psychological contract between them may engage in counterproductive work behaviours (Rousseau, 1989). Given the intention of the employee to harm the organisation, training transfer under this psychological state may be minimal.

These findings and others suggest that when a no training transfer is taking place it may be as a result of the employee displaying CWB behaviour. The reasons for such behaviour may include personality traits, organisation climate and organisational culture. The reason for CWB could be a perceived break in the relationship between employer and employee or a perceived bias towards the employer. A feeling of helplessness by not being able to implement new skills due to the crowding out of innovation in the workplace may also explain this behaviour. Training transfer as can be seen does predict the behaviour displayed. Organisations that monitor the level of training transfer will then be able to be alerted of possible behavioural issues present at the workplace and investigate further. The key is to identify the lack of training transfer as the trigger for further investigations with a view to improving performance.

5.3 Discussion pertaining to Hypothesis 2

Employee Engagement ⇨ Performance behaviours

The second sub problem is to assess the association between employee engagement and in role behaviour, organisational citizenship behaviour and counterproductive work behaviours. When fitting the data collected for the behaviour items a superior fit was established and four factors were retained.

5.3.1 Hypothesis 2(a)

Employee Engagement ⇨ IRB

Hypothesis 2(a), states that *employee engagement is positively associated with in-role behaviours*. The correlation analysis shows that non-emotional engagement has modest and significant positive correlations with IRB ($r = .25$, $p < .001$). The regression analysis suggests that non emotional engagement has a weak, significant association with IRB ($\beta = 0.11$, $p < 0.05$). Therefore the hypothesis is not fully supported. This finding is somewhat expected and is consistent with literature. Organ and Ryan (1995) also found a weak relationship between job satisfaction and in-role behaviour. Schaufeli and Salanova (2007) suggested that there is a undeviating link between engagement and enhanced job satisfaction. Therefore it supports the finding that a weak link is present between non-emotional engagement and in-role behaviour. Further, Locke (1983) found that job satisfaction is the non-emotional element of engagement. These findings confirm this.

The findings suggest that employees who display IRB behaviour are not engaged with the organisation but perform according to the behaviour required for the completion of their work tasks. One of the motivations for engagement is personal reward for the employee. An employee may be engaged with their job and hence looks to improving job efficiency. In other words there is a dissimilarity between work engagement and organisational engagement. In this case employees display more affinity to job engagement because they may enjoy what they do. Also they may be in roles which allow the application of their acquired skills and knowledge to be easily transferred. This may create a

perception of a strong relationship between employee and employer in which the employee benefits by being able to perform has job or task more efficiently. This climate of innovation created by the employer is positively received by the employee and allows the employee to benefit by effectively performing his allocated role. Therefore these employees do not display any psychological attachment to the organisation by merely there to fulfil the specific role for their own benefit. These employees may be indifferent towards the organisation and may be possible candidates to target during engagement sessions to move them towards displaying extra-role behaviour.

5.3.2 Hypothesis 2(b)

Employee Engagement ⇨ OCB-I

Hypothesis 2(b), states that *employee engagement is positively associated with individual-focussed organisation citizenship behaviours*. The research findings within the report support this hypothesis. The correlation analysis demonstrates a modest and significant positive correlations with OCBI (r = .23, $p < 0.001$). The regression analysis suggests that non-emotional engagement has a modest and statistically significant effect (β = .16, $p < .05$). Therefore the hypothesis is supported for non-emotional engagement, although weakly. This finding is expected and is consistent with literature. Organ and Ryan (1995) established a moderate weak link of OCB's with job satisfaction. Job satisfaction is the non-emotional element of engagement Locke (1983). This infers that a modest relationship would be found between non emotional engagement and OCB-I.

Saks (2006) suggested that employee engagement is defined by the level at which a worker is involved in the outputs of his role. Saks (2006) also noted two levels of engagement i.e. job engagement and organisational engagement which translates into a degree of psychological attachment with the employer. Although an employee may be engaged to their job does not necessarily mean that the engagement is directed to the organisation. The OCB-I behaviour may be as a result of the employee wanting to improve their colleague networks for themselves and for future career prospects, after all employees engage in

behaviour which results in benefit to themselves. These networks may benefit them in future or may benefit them in being more efficient in performing their own allocated tasks.

5.3.3 Hypothesis 2(c)

Employee Engagement ⇨ OCB-O

Hypothesis 2(c), states that *employee engagement is positively associated with organisation-focussed organisation citizenship behaviours*. The correlation analysis indicates a modest and significant positive correlations with OCBO (r = .17, $p < 0.001$). The regression analysis suggests that emotional engagement has a statistically significant but small effect (β = .12, $p < .05$), this is a weak effect in magnitude. Therefore the hypothesis does not have a great deal of support. This finding is expected and is consistent with literature. Chen et al. (1998) found no significant correlation between OCB/OCBI and job satisfaction. However, Lee & Allen (2002) established that job satisfaction may be connected to OCBO and not OCBI. These contrasting views can be found in the literature that when employees identify with the organisation they tend to engage in a reciprocal behaviour to contribute more towards the organisation directly.

From the above it is evident that no definite relationship between OCB's and engagement has been determined from research. Our findings are consistent with that of Chen et al. (1998). It however goes against some literature that supports the notion that employee engagement does have a positive relationship with OCB-O. An explanation for this may be that employees may be engaged with their job and this may not necessarily mean that they are engaged with their organisation. Rioux and Penner (2001) found that there are motivating factors for employee engagement which always includes worker incentive. This infers that workers engage in OCB believing it to ultimately favour a positive outcome for themselves. This argument means that individuals engaging in OCB is a choice to meet their specific needs and outcome. It is easier to engage in IRB behaviour to gain reward than OCB because the gain to the employee is more pronounced for IRB. Therefore a high level of engagement with their jobs does not necessarily translate into OCB behaviour.

Unfortunately the questions did not necessarily investigate the level of engagement i.e. job level, organisational level etc.

5.3.4 Hypothesis 2(d)

Employee Engagement ⇨ CWB

Hypothesis 2(d), states that *employee engagement is negatively associated with counter-productive work behaviour*. The correlation analysis demonstrates a weak negative correlation with CWB (r = -0.06, $p < 0.1$). The regression analysis suggests that employee engagement has little or no association with CWB (β = -0.06, $p< 0.01$). Therefore the hypothesis is not supported. Literature supports this finding. Counterproductive work behaviours may be carried out by individuals intended to harm stakeholders, the organisation and its employees (Marcus and Schuler, 2004). As indicated before, individuals that believe that the organisation has broken the psychological contract between them may engage in counterproductive work behaviours. It is therefore expected that engaged employees will not engage in CWB because they maintain a positive perception of their work situation. Engagement is an optimistic psychological condition which may increase IRB and OCB behaviours and lessening CWB tendencies. This finding is hence supportive of theory in this regard because of the negative correlation although not strongly demonstrated in the figures. It also follows that because engagement is a discretionary effort that an employee exhibits (Frank et al., (2004) that engagement will not lead to CWB being displayed. That is exactly what we found i.e. engaged employees not displaying traits supporting CWB.

5.4 Discussion pertaining to Hypothesis 3

The third sub-problem is to assess the extent to which age controls the association between training transfer and employee behaviours as well as how age controls the link between engagement and employee behaviours. Only the following moderations show effect on these relationships.

5.4.1 Hypothesis 3 (a)

Hypothesis 3(a), states that *employee age moderates the relationship between training transfer and employee behaviours such that younger employees will have a stronger relationship.* The moderation regression analysis suggests that the connection between training transfer with in-role behaviours is statistically significant at (β = .09, p < .001) with little change to the adj r2. It infers that older employees have a somewhat stronger positive relationship between transfer and IRB than younger staff. This contradicts Hypothesis 3a

This finding is aligned to that of Krapp (2005) and Smith and Reio (2006), who found that motivation to learn may not be a functional of age but maintained throughout your work life. Age therefore does not hinder the acquisition and application of new skills. Further, job mastery may explain why older employees might transfer training to the work. Older individuals may be able to identify how and where to apply these newly acquired skills to increase performance. In other words this is related to job specific experience which comes with age because they are able to ascertain the influence of the training on their current job and determine if the generalisation of the training will improve performance. As employees age, job security becomes a priority because they do not want to jeopardise their employment contract. One way of improving job security is to ensure that the organisation realises a return on investment from the training intervention. This incentivises the employee to transfer the newly acquired skills to the workplace and hence attempt to demonstrate an improvement in performance or output. Older employees understand the organisation culture better and therefore know the extent to which they may implement newly acquired skills without disturbing the processes in place. They understand the values of the organisation better and are able to adapt the training to suit the prevailing culture. People go through different phases or life stages. At different stages the priorities change, particularly their view on personal and career goals. The propensity of an employee to leave employment during the middle to later stages of their career is also a determinate of training transfer. Younger employees may be more focussed on career and personal development whilst older employees have shifted focus towards performing at work and personal

gratification. Also family and social interaction becomes more prominent. This influences their reluctance to leave as they seek stability and structure. Younger employees have the opportunity to choose another job because they are at the early stages of their career. As workers age they attempt to become more established at their workplace and hence transfer training to gain efficiency and recognition because their propensity to leave decreases with age.

The second moderation in this set is that of age on the relationship between training transfer and counterproductive workplace behaviours (CWB). The moderation regression analysis suggests that the interaction is significant (β = .15, $p < .001$). This suggests that older employees have a stronger negative relationship between transfer and CWB than younger staff. This contradicts the hypothesis. Younger employees have not yet developed strong bonds with their employer and are likely to leave if they do not enjoy their job. Because of their age they are more likely to have opportunities at other employers and may also change careers if they find that they do not enjoy what they do. If they find that their job is inappropriate they have ample time and opportunity to find another when they are young. As they age they attempt to become more established and hence do not engage in CWB. Another explanation could be that younger employees may not be effectively utilised. They could possibly lack the confidence to transfer the training to the workplace because they do not sufficiently understand the workplace dynamics. They may be inexperienced in identifying how and when to apply the new skills. Further, workplace networking with decision makers may be low when employees are younger because generally decision makers tend to be experienced and hence older. This hinders their ability to transfer training. Older employees are at a life stage where they seek stability and do not want to jeopardise their work relationship by engaging in CWB. They have established themselves at work and have developed a specific work ethic. They may also be well utilised because of their experience and work ethic.

5.4.2 Hypothesis 3 (b)

Hypothesis 3(b), states that *employee age moderates the relationship between engagement and employee behaviours such that younger employees will have*

a stronger or positive relationship. The moderation regression analysis of age on the relationship between non-emotional engagement and OCBI is statistically significant at (β = -.07, p < .001). It suggests that younger employees have a somewhat stronger positive relationship between non-emotional engagement and OCBI than older staff. This supports the hypothesis.

The second substantial moderation in this set is that of age on the link between emotional engagement and OCBO. This result suggests that the interaction is statistically significant at (β = -.07, p < .001). It suggests that younger employees have a somewhat positive relationship between emotional engagement and OCBO whereas older staff have no relationship – this may explain the poor overall effect in the main regression. This supports the hypothesis.

The third substantial moderation in this set is that of age on the link between emotional engagement and OCB-I. The moderation regression analysis found the interaction to be statistically significant at (β = -.07, p < .001). As can be noted, older employees have a negative relationship between emotional engagement and OCBI with the relationship tending towards zero as employees get younger and possibly becoming positive for young employees. This supports the hypothesis.

The findings are consistent with literature and other research in this field. As employees increase tenure they also get older. Truss et al. (2006) confirmed Schaufeli and Bakker's (2004) theory that engaged workers are unlikely to leave but longer serving employee become less engaged over time. Buckinghan (2001) also found that as tenure increased engagement decreased. This was confirmed by Truss et al. (2006), who found an negative association between engagement and tenure

Younger employees are in the early stages of their career and want to demonstrate their willingness to commit and enhance their contribution to their colleagues and hence display OCB-I behaviour and are more engaged with the view to possible career advancement. This is also an opportunity to build networks and join existing networks. This may be as a result of them

understanding that because they are earlier in their career the opportunity for career progression is less and hence they have to gain experience and prove themselves at the organisation. Younger employees are also more excited because they have started on their career paths. They are looking for recognition and reward and hence have a personal stake in being engaged. It could also be that younger employees enjoy what they do and are eager to develop bonds with the organisation and colleagues. OCB-I allows them an opportunity to interact and assist with a view to network and become established in their jobs.

These finding therefore support the notion that age may have an influence on worker engagement and both elements of OCB. It also dispels the idea that older employees are more engaged by virtue of them continuing to work at an organisation for longer periods.

5.5 Discussion pertaining to Hypothesis 4

The fourth sub-problem is to examine how tenure controls the relationship between training transfer and employee behaviours as well as how tenure controls the relationship between engagement and employee behaviours. The following moderations show effect on the relationships.

5.5.1 Hypothesis 4 (a)

Hypothesis 4(a), states that *employee tenure moderates the relationship between training transfer and employee behaviours such that newer employees will have a weaker relationship.* The only substantial moderation in this set is that of tenure on the relationship between training transfer and CWB. The moderation regression suggests that the interaction is statistically significant at (β = .10, $p < .001$). We found that newer employees have a stronger negative relationship between transfer and CWB than longer-serving staff. This contradicts the hypothesis.

However the finding is consistent with literature and other findings. Truss et al. (2006) confirmed Schaufeli and Bakker's (2004) theory that engaged workers

might not leave but longer serving employee become less engaged over time. Buckinghan (2001) also found that as tenure increased engagement decreased. As stated before there may be an inverse relationship between engagement and tenure and job satisfaction and tenure. Our findings are consistent with other findings.

Newer employees may have less tenure within the organisation but may be well experienced and older. As a result the discussion offered for the moderating effect of age may also have relevance. The reason for this could be that new employees are engaged more and therefore less inclined to engage in counter-productive work behaviours. There may be excitement of starting a new job and the optimism of this which results in behaviour that is positive. In the initial stages of a workers career they might not want to jeopardies career development by engaging in CWB. Newer employees are also still mastering their job roles at their new organisation and are determined to be noticed within the organisation. They also enjoy their work roles and are hence fully engaged and may also be fully utilised. As discussed earlier, the life stage that the employee is at may also have an influencing role.

Newer employees lack any psychological attachment with the organisation and hence do not display any OCB behaviour. The consequences of leaving have minimum impact for new employees, hence they may have no reason to embark on OCB behaviour. The lack of findings related to OCB's and tenure is also consistent with other findings by Philip and Podsakoff et al. (2000).

5.6 Conclusion

This research examined the impact of age, tenure, training transfer and employee engagement on employee behaviour related to OCB-I, OCB-O, IRB and CWB as proxies for performance. These research findings provide evidence that training transfer positively impacts performance. The reasoning is that employees who transfer training enhance organisational performance because a culture of learning and employee development promotes innovation and change. Organisations that provide an environment that allows training

transfer to take place are fostering the right climate and hence enable a return on investment from the training expenditure to take place. This culture also leads to employee engagement. Therefore this study attempted to examine the association of both these variables, training transfer and employee engagement, with the outcome variables of OCB-O, OCB-I, IRB and CWB. We further examined the moderation of these relationships by employee age and tenure.

We found that training transfer is positively associated with IRB. This is supported by other researchers. This finding can be used to predict the behaviour displayed by trainees at the workplace and hence determine if the newly learnt skills are generalised. The association between training transfer and individual focused organization citizenship behaviour was confirmed. Further we found that training transfer is positively related to organization-focused organization citizenship behaviour. There was also support found for training transfer being negatively related to counter-productive work behaviour.

This study also confirmed that employee engagement is positively associated with in-role behaviours, individual-focused organization citizenship behaviours and organization - focused organization citizenship behaviours. The association between engagement and counter-productive work behaviour was confirmed to be negative, however the model did not fully show the effect.

Employee age controls the connection between training transfer and employee behaviours such that younger employees will have a stronger relationship. Although the hypothesis was not supported, the finding does have support from some research. Support for the moderation by employee age on the engagement - employee behaviour reltationship was found, such that younger employees have a stronger or positive relationship. The findings are consistent with literature and other research in this field.

The moderating effect of tenure was found to only be significant when on the relationship with CWB and training transfer. No support for the proposition that employee tenure moderates the relationship between training transfer and

employee behaviour was found, such that newer employees have a weaker relationship. However the finding is consistent with literature and other findings.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This research examined the effect of training transfer and employee engagement on performance by using employee behaviours i.e. OCB-O, OCB-I, CWB and IRB as proxies for performance. Further, we scrutinised the controlling effect of employee age and tenure on these relationships. The research problem is investigated largely using the Baldwin and Ford's (1988) model for training transfer and Kahn's (1990) proposition on employee engagement. This chapter outlined the conclusion derived from the findings to the sub problems identified.

6.2 Conclusions of the study

As discussed, unless learnt knowledge, skills, behaviours and attitudes are generalized through training and maintained over time, no value will be extracted from the training (Kozlowski and Salas, 1997). According to Swanson (1995), transfer of training is required to link individual changes to the organization's benefit. This infers that training makes no contribution unless it is implemented at work and influences performance. Training transfer is influenced by many factors including trainee characteristics, work context and training design, opportunity to implement and hence contribute to the performance of the individual and organisation (Holton et al., 2000). From the literature it is noted that there are benefits to understanding employee behaviours which may in turn have a noteworthy influence on employee and organizational output.

This study scrutinised the association between training transfer and employee behaviours, as a proxy for performance, and found that the degree to which transfer of training is generalized can indicate the behaviour being displayed by employees and hence training transfer positively impacts performance. This research also confirmed that training transfer is negatively related to counter-

productive work behaviour. This implies that organizations can reasonably determine the expected employee performance improvement after assessing the post training evaluation and the generalization, by the trainee, of the new skills learnt to the workplace. Periodic evaluation of the specific training intervention will also demonstrate the expected performance from these employees and the return on the training expenditure over time. This research highlights that employers should focus on training transfer to improve performance. The evaluation of training interventions and their generalisation to the workplace becomes a tool to improve performance. This must be done together with a performance management system which includes training generalisation as a measure. Employers must also concentrate on refining the features that aid training implementation because the link between performance improvement and training transfer has been confirmed by other research as well as this study. The work environment post the training intervention becomes critical.

The study also observed at the connection between employee engagement and improved output and confirmed that a positive association exists. However the association was not as strong as was expected. There exists a popular view in industry that to improve performance you need to improve employee engagement. This research confirms that engagement is a factor in improving performance but may not be the major factor. In fact it has emerged as having a smaller impact on performance than training transfer and generalisation of the training to the workplace.

The research examined if employee age controls the training transfer and performance relationship. It was found that older employees are more likely to transfer new skills to the workplace than younger employees and hence improve performance. This is significant as employers tend to be reluctant to employ older workers. This research found that older workers are more likely to generalise new skills to the workplace and hence improve performance. This finding goes agaist the conventional practice and a review of this practice may enhance organisational performance in the long term. It was noted that employee age moderates the association between engagement and worker

behaviour such that younger employees will have a stronger or positive relationship. The findings are consistent with literature and other research in this field.

The finding pertaining to the controlling effect of tenure on the connection between training transfer and engagement and worker behaviours was disappointing because only one effect was found to be significant. This is the effect of tenure on the transfer- CWB relationship. Although it contributes to the existing literature, I was expecting to find a greater effect. There are many reasons for the effect not being found here which include misinterpretation of the question on tenure. The moderating effect of tenure was found to only be significant when on the relationship with CWB and training transfer. The proposition that employee tenure controls the relationship between training transfer and employee behaviour such that newer employees have a weaker relationship was not confirmed or supported. However the finding is consistent with literature and other findings.

6.3 Recommendations

Employees are central to any strategy implementation by virtue of being an imperative resource. It is therefore important that the workforce is sufficiently skilled to adapt to the changing business environment and strategy (Goldstein and Gilliam, 1990). Resource allocation in this dynamic environment is a challenge and resources are usually allocated to the projects that bring the greatest return. It is therefore critical that the return on training investment is demonstrated and the factors affecting it are understood.

Employee role behaviours may proxies for expected employee and organizational performance. The association between training transfer and positive employee behaviours established in this study will enhance the return on investment from the training. Employers should establish a more rigorous training evaluation system which includes supervisor evaluation before and after training during different intervals. This is also suggested by Phillips (1997), in which the evaluation of the return of investment from training can be measured.

This will assist in determining the training transfer generalisation and maintenance over time as well as the performance improvement. Employers should hence focus on training transfer as a key means of improving performance. An established performance management system must include training transfer performance indicators. The post training work environment must be conducive to assist transfer to occur as part of other measures. The incorporation of training in the firms resources practices in order to leverage improved performance was also confirmed by Combs *et* al. (2006). To this end, employers can make the workplace more amenable to changes expected from the generalisation of training or new skills learnt. Innovation must not be crowed out but properly managed. This could be done by having multi-disciplinary group discussions to evaluate the new skills before implementation. This will mitigate risks associated with new implementations and also allow for transfer to occur between peers and hence their expected performance.

This investigation has established that there is an association between positive work behaviours and training transfer. This was also confirmed in a study by Bartel (1994). This then implies that an employee's behaviour can be assessed based on his training generalization to the workplace of new skills. Many organizations conduct training evaluation after training interventions and hence this information can be used to extrapolate the workplace behaviour of individuals. Employers can reasonably determine who are likely candidates for selection for promotion, new projects, expansions etc. and choose candidates based on employee role behaviours displayed.

This investigation confirmed a performance and employee engagement association, although not as strong as was expected. Employers have focussed a lot of effort to determine employee engagement levels and developing action plans to improve same. This may not be the most efficient way of improving performance. If the same amount of effort is put into evaluating training transfer and creating an ideal environment to allow transfer to take place, a greater return may be expected. This is especially true because engagement results can be affected by numerous factors which are quite dynamic.

The issue of employee age and tenure and their effect on productivity was examined and found to indicate that there is a moderating effect by age only. We established that older workers are more amenable to transfer training and hence improve performance. Employers should then reconsider the recruitment profiles based on age. It was established that older workers displayed greater degree of IRB and transfer. It then implies that employers may consider multi age teams when embarking on new projects or when looking at performance improvement initiatives. This was also suggested by Paris et al. (2000). When embarking on change management initiative employers may consider older workers as change agents because they are more likely to embrace new skill and changes than younger workers. This will assist when selection of change agents, change management champions etc. are required. Older workers are more likely to embrace new practices and work methods after training and should also be used in organisational and process enhancement projects to improve productivity.

Employers should allow for greater networking opportunities at work so that older employees can interact with younger ones, since training transfer is greater in older workers. Companies may find ways to increase social and professional networks within the company. Employers should endeavour to create social context to foster teamwork, discretionary behaviour so that engaged employees can do their work more efficiently by social interaction between different age groups.

6.4 Suggestions for further research

Limitations to this study can be explored in future research. Although many factors affecting training transfer were addressed, a few remain. These may have a material effect on the results and may be addressed in future research. An example would be the effect of work group or peer support on training transfer. This was found to be a factor by Ford et al. (1992). Another factor not addressed is the training design. This factor includes the material, quality of instruction, and type of training. Future researchers may want to look at the

effect of these factors on training transfer and how it associates with employee workplace behaviour prediction.

This study relied on the memory of participants to explain their experience and perceptions on training. This method may not be most effective as gaps in recalling may affect the result. Future research could conduct the survey immediately after training interventions and at set intervals post training.

Power and range issues may be resultant from the data measurement levels. Future research may include a greater number of levels. Further, the measures focus on quantity of training and the quality aspects is neglected somewhat. This could be addressed in future research.

The moderating effect of age can be further examined by segmenting the type of training being conducted. This is especially critical because cognitive functions may affect training transfer. Future researchers may consider a replicating the study on the same sample over different time horizons to analyse the effects. Further, industry segmentation is also critical when determining the effect of age as different levels of skill are required in different industries. Industry specific replication may be considered.

Quantitative research does not elaborate on underlying reasons for certain responses from observations. This study is part of the social interaction and hence the quantitative method does not account for human perception, therefore future researchers may consider a mixed methodology for data gathering and analysis. The population was based on convenience and voluntary participation in Gauteng only, therefore future researchers may consider replicating the study in different provinces because the workplace climates may differ.

This research focussed on individual attitudes and roles and very little focus was given to team effect on behaviour. However, the research did confirm the theory to a large extent and the limitations mentioned above, if addressed will enhance the research and confirm the findings.

REFERENCES

Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, *67*(5), 422.

Arthur, W., Bennett, W., Stanush, P. L., & McNelly, T. L. (1998). Factors that influence skill decay and retention: A quantitative review and analysis. *Human Performance, 11*, 57–101.

Autor, D. H., Levy, F., & Murnane, R. J. (2003). The skill content of recent technological change: An empirical exploration, forthcoming: Quarterly Journal of Economics, 118(4).

Babbie, E. and Mouton, J. (2001) *The Practice of Social Research,* Southern African ed., Oxford University Press, South Africa.

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel psychology*, *41*(1), 63-105.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191-215.

Bandura, A. (1986). *Social foundations of thought and action* (pp. 5-107). Prentice Hall: Englewood Cliffs, NJ.

Bandura, A. (1986). *Social foundations of thought and action* (pp. 5-107). Prentice Hall: Englewood Cliffs, NJ.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Barber, J. (2004). Skill upgrading within informal training: lessons from the Indian auto mechanic. *International Journal of Training and Development*, *8*(2), 128-139.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

Bartel, A. P. (1994). Productivity gains from the implementation of employee training programs. *Industrial relations: a journal of economy and society*, *33*(4), 411-425.

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of management Journal*, *45*(3), 587-597.

Becker, B. E., Huselid, M. A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. In *Research in personnel and human resource management*.16: 53-101.
Becker, H. S. (1960). Notes on the concept of commitment. *American journal of Sociology*, 32-40.

Birdi, K., Allan, C., & Warr, P. (1997). Correlates of perceived outcomes of four types of employee development activity. *Journal of Applied Psychology, 82*, 845–857.

Bjorklund, D. F. (1987). How age changes in knowledge base contribute to the development of children's memory: An interpretive review. *Developmental Review*, *7*(2), 93-130.

Bopp, K. L., & Verhaeghen, P. 2005. Aging and verbal memory span: A meta-analysis. *Journals of Gerontology. Series B: Psychological Sciences and Social Sciences***,** 60: 223–233.

Brendan, B., Down, N., (2000) "The Skills Development Act: transforming education and training for workers." S A Labour Bulletin 24(2), 6 –11.

Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of applied psychology*, *81*(4), 358- 368.

Buckingham, M. (2001). What a waste, *People Management,* 11 October, pp36-39.

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human resource development Review*, *6*(3), 263-296.

Campbell, D. T. (1986). Relabeling internal and external validity for applied social scientists. *New Directions for Program Evaluation*, *1986*(31), 67-77.

Campbell, J. P. 1990. Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, Vol. 1: 687-732. Palo Alto, CA: Consulting Psychologists Press.

Campbell, J. P., & Campbell, R. J. (1988). *Productivity in organizations: New perspectives from industrial and organizational psychology* (pp177-216). San Francisco :Jossey-Bass.

Carlson, D.S., Bozeman, D.P., Kacmar, K.M., Wright, P.M. and McMahan, G.C. (2000), “Training motivation in organizations: an analysis of individual-level antecedents”, *Journal of Managerial Issues*, Vol. 7, pp. 271-87.

Chatman, J. A. 1991. Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly*, 36: 459-484.

Chen, X. P., Hui, C., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of applied psychology*, *83*(6), 922.

Chen, X. P., Hui, C., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of applied psychology*, *83*(6), 922-981.

Chiaburu, D. S., & Marinova, S. V. (2005). What predicts skill transfer? An exploratory study of goal orientation, training self-efficacy, and organizational supports. *International Journal of Training and Development, 9*, 110–123.

Churchill, J. G. (1995) *Marketing Research Methodological Foundations,* Sixth ed., The Dryden Press, Wisconsin.

Clark, C. S., Dobbins, G. H., & Ladd, R. T. (1993). Exploratory field study of training motivation influence of involvement, credibility, and transfer climate. *Group & Organization Management*, *18*(3), 292-307.

Colonia-Willner, R. (1998). Practical intelligence at work: relationship between aging and cognitive efficiency among managers in a bank environment. *Psychology and aging*, *13*(1), 45.

Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research. *Journal of applied psychology*, *85*(5), 678-707.

Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, *59*(3), 501-528.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of management review*, *13*(3), 471-482.

Cramer, D. (2010). *Advanced Quantitative Data Analysis* (Fifth ed.). Philadelphia: McGraw-Hill.

Creswell, J. W. (2009). *Research design, qualitative, quantitative and mixed methods approaches(* Third ed.). Nebraska: SAGE Publications Inc.

Cromwell, S. E., & Kolb, J. A. (2004). An examination of work-environment support factors affecting transfer of supervisory skills training to the workplace. *Human Resource Development Quarterly*, 15, 449–471.

Deary, I. J., Whalley, L. J., Lemmon, H., Crawford, J. R., & Starr, J. M. (2000). The stability of individual differences in mental ability from childhood to old age: follow-up of the 1932 Scottish Mental Survey. *Intelligence*, *28*(1), 49-55.

Dunnette, M. D., & Hough, L. M. (1991). *Handbook of industrial and organizational psychology, Vol. 2* . Consulting Psychologists Press.
Ehrenberg, R. G., & Smith, R. S. (2000). Modern labor economics: Theory and public policy. MA: Addison Wesley.
Employee Attitudes and Engagement 2006. London, CIPD.

Erasmus BJ and Van Dyk PS. (2005). Training Management in South Africa. Cape Town, Oxford University Press.

Evans, J. R. (2010) *Statistics, Data Analysis, and Decision Modeling,* (Forth ed). In Pearson, Cincinnati.

Feldman, D. C. (1976). A contingency theory of socialization. *Administrative Science Quarterly*, 21: 433-452.

Fink, A. (1995) *The Survey Handbook (Vol 1).* California: SAGE

Fitzpatrick, R. (2001). The strange case of the transfer of training estimate. *The Industrial-Organizational Psychologist*, *39*(2), 18-19.

Ford, J. K. (1997). Improving Training Effectiveness in Work Organizations. Series in Applied Psychology. pp.247-287. Hillsdale,NJ:Erlbaum.

Ford, J. K., Quiñones, M. A., Sego, D. J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel psychology*, *45*(3), 511-527.

Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59, 291–309.

Foxon, M. (1997). The influence of motivation to transfer, action planning, and manager support on the transfer process. *Performance Improvement Quarterly, 10*(2), 42–63.

Frank, F. D., Finnegan, R. P., & Taylor, C. R. (2004). The race for talent: retaining and engaging workers in the 21st century. In *Human Resource Planning*.

Frayne, C. A., & Latham, G. P. (1987). Application of social learning theory to employee self-management of attendance. *Journal of applied psychology*, *72*(3), 387.

García, M. Ú. (2005). Training and business performance: The Spanish case. *The International Journal of Human Resource Management*, *16*(9), 1691-1710.

Gartner, S. (2000). Structural determinants of job satisfaction and organizational commitment in turnover models. *Human Resource Management Review, 9* (4), 479–493.

Giblin, E. J. (1986). The challenge facing human resources. In H. Heneman & D. Schwab (Eds.),Perspectives on personnel/human resource management, (3rd ed): 11-16. Homewood, IL: Irwin.

Giniger, S., Dispenzieri, A., & Eisenberg, J. (1983). Age, experience, and performance on speed and skill jobs in an applied setting. *Journal of Applied Psychology*, 68: 469-475.

Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Beverly Hills: Sage Publications.

Golafshani, N. (2003) Understanding reliability and validity in qualitative research, The Qualitative Report, 8(4), pp. 597-607.

Goldstein, I. L. (1993). Training in organizations: Needs assessment, development, and evaluation . Thomson Brooks: Cole Publishing Co.

Goldstein, I. L., & Gilliam, P. (1990). Training system issues in the year 2000. American Psychologist, 45(2), 134.

Greco, P., Laschinger, H. K. S., & Wong, C. (2006). Leader empowering behaviours, staff nurse empowerment and work engagement/burnout. *Nursing Leadership*, *19*(4), 41-56.

Griffin. R. W., & Bateman, T. S. (1986). Job satisfaction and organizational commitment. In C. L. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 157-188). New York: Wiley.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, *2*, 163-194.

Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International journal of human resource management*, *8*(3), 263-276.

Haccoun, R. R., & Saks, A. M. (1998). Training in the 21st century: Some lessons from the last one. *Canadian Psychology, 39*, 33–51.

Henning, E., Van Rensburg, W., & Smit, B., 2004, *Finding your way in qualitative research* (pp.17). Pretoria : van Schaik Publishers.

Hill, C. E., & Lent, R. W. (2006). A narrative and meta-analytic review of helping skills training: Time to revive a dormant area of inquiry. *Psychotherapy: Theory, Research, Practice, Training*, *43*(2), 154.

Hill, T. and Lewicki, P. (2007) *Statistics: Methods and Applications. A Comprehensive Reference for Science, Industry, and Data Mining* (First ed). Tulsa: StatSoft Inc.,.

Holton, E. F., Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, *8*(2), 95-113.

Holton, E. F., Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, *8*(2), 95-113.

Holton, E. F., III, Bates, R. A., & Ruona, W. E. A. (2000).Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11, 333–360.

Holton, E. F., III, Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly, 8*, 95–113.

Hopkins, K. M. (2002). Organizational citizenship in social service agencies. *Administration in Social Work*, *26*(2), 1-15.

Horn, J. L., & Cattell, R. B. (1966). Refinement and test of the theory of fluid and crystallized general intelligences. *Journal of educational psychology*, *57*(5), 253-270.

Hungler, B. P., & Polit, D. F. (1999). Nursing research principles and methods. pp37.

Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, *64*(4), 408-417.

Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33,* 692–724.

Kataria, A., Garg, P. & Rastogi, R. (2013). Employee engagement and organisational effectiveness: The role of organisational citizenship behavior. *International Journal of Business Insights and Transformation*, 6 (1), 102-113.

Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral science*, *9*(2), 131-146.

Kennedy, K. M., Partridge, T., & Raz, N. (2008). Age-related differences in acquisition of perceptual-motor skills: Working memory as a mediator. *Neuropsychology, Development, and Cognition. Section B, Aging, Neuropsychology and Cognition,* 15: 165–183.

Kliegl, R., & Mayr, U. (1992). Shifting levels of analysis in the investigation of cognitive aging: commentary. *Human Development*, 35: 343-349.

Kontoghiorghes, C. (2001). A holistic approach towards motivation to learn. *Performance Improvement Quarterly, 14* (4), 233–246.

Kozlowski SWJ, Gully SM, Brown KG, Salas E, Smith EM,Nason ER. 2001. Effects of training goals and goal. orientation traits on multidimensional training outcomes and performance adaptability. *Organisational Behavior. Human. Decision. Processes,* 85:1–31.

Kozlowski, S. W. J., Brown, K. G., Weissbein, D. A.,Cannon-Bowers, J. A., & Salas, E. (2000). A multilevel approach to training effectiveness. In K. J.Klein & S. W. J. Kozlowski (Eds.), Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions (pp.157–210). San Francisco, CA: Jossey-Bass.

Kozlowski, S. W., & Salas, E. (1997). A multilevel organizational systems approach for the implementation and transfer of training. *Improving training effectiveness in work organizations*, *247*, 287. Hillsdale: Erlbaum

Krapp, A. (2002). Structural and dynamic aspects of interest development: Theoretical considerations from an ontogenetic perspective. *Learning and instruction*, *12*(4), 383-409.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). CONSEQUENCES OF INDIVIDUALS'FIT AT WORK: A META-ANALYSIS OF PERSON–JOB, PERSON–ORGANIZATION, PERSON–GROUP, AND PERSON–SUPERVISOR FIT. *Personnel psychology*, *58*(2), 281-342.

Lather, P. (1986). Research as praxis. *Harvard educational review*, *56*(3), 257-278.

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of Applied Psychology*, *87*(1), 131-142.

Lindenberger, U., & Baltes, P. B. (1994). Sensory functioning and intelligence in old age: A strong connection. *Psychology and Aging*, 9: 339-355.

Locke, E. A. (1983). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of Industrial Psychology* (1297–1349). Chicago, IL: Rand–McNally College Publishing Company.

Lynch, L. M., & Black, S. E. (1998). Beyond the incidence of employer-provided training. *Industrial & Labor Relations Review*, *52*(1), 64-81.

Maboa TEI. (2009). Evaluating the impact of Employment Skills Development Services (ESDS).

Machin, M. A., & Fogarty, G. J. (1997). The Effects of Self-Efficacy, Motivation to Transfer, and Situational Constraints on Transfer Intentions and Transfer of Training. *Performance Improvement Quarterly*, *10*(2), 98-115.

Magister Educationis. University of Pretoria, Faculty of Education, Department of Science Mathematics and technology Education. P 1-130.

Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general perspective. Journal of Applied Psychology, 89(4), 647–660.

Maslach, C., W.B. Schaufelli, and M.P. Leiter, 2001, “Job Burnout,” *Annual Review of Psychology*, 52, 397-422. Tannenbaum, S. I. (1997). Enhancing continuous learning: diagnostic findings from multiple companies. *Human resource management*, *36*(4), 437- 452.

Mathieu, J. E., & Martineau, J. W. (1997). Individual and situational influences on training motivation. *Improving training effectiveness in work organizations*, *193*-221.

McArt, E. W., & McDougal, L. W. (1985). Secondary data analysis–a new approach to nursing research. *Image: The Journal of Nursing Scholarship*, *17*(2), 54-57.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, *1*(1), 61-89.

Meyer, J. P., &Allen, J. N. (1984). Testing the side-bet theory of organizational commitment: Some methodological considerations. *Journal of Applied Psychology, 69,* 372-378.

Mobley, W. H. (1977). Intermediate linkages in the relationship between job dissatisfaction and employee turnover. *Journal of Applied Psychology, 62* (2), 237–240.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover* (Vol. 153). New York: Academic Press.

Myerson, J., Hale, S., Wagstaff, D., Poon, L. W., & Smith, G. A. (1990). The information-loss model: a mathematical theory of age-related cognitive slowing. *Psychological review*, *97*(4), 475-486.

Naquin, S.S. and Holton, E.F. (2002), “The effects of personality, affectivity, and work commitment on motivation to improve through learning”, *Journal of Human Resource Development Quarterly*, 13(4), 357-376.

Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. *Academy of management review*, *11*(4), 736-749.

Noe, R. A., & Schmitt, N. (1986). The influence of trainee attitudes on training effectiveness: Test of a model. *Personnel psychology*, *39*(3), 497-523.

Noe, R. A., & Wilk, S. L. (1993). Investigation of the factors that influence employees' participation in development activities. *Journal of applied psychology*, *78*(2), 291-303.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of applied psychology*, *74*(1), 151-164.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel psychology*, *48*(4), 775-802.

Paris, C. R., Salas, E., & Cannon-Bowers, J. A. (2000). Teamwork in multi-person systems: a review and analysis. *Ergonomics*, *43*(8), 1052-1075.

Park, D. C., Nisbett, R., & Hedden, T. (1999). Aging, culture, and cognition. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *54*(2), P75-P84.

Perkins, D. N., & Salomon, G. (2012). Knowledge to go: A motivational and dispositional view of transfer. *Educational Psychologist*, *47*(3), 248-258.

Pfeffer, J., & Veiga, J. F. (1999). Putting people first for organizational success. *The Academy of Management Executive*, *13*(2), 37-48.

Phillips, J. J. (1997). *Handbook of training evaluation and measurement methods*. Routledge.

Pineda, P. (2010). Evaluation of training in organisations: a proposal for an integrated model. *Journal of European Industrial Training*, 34 (7), 673-693.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of management*, *26*(3), 513-563.

Porter, L. W., & Lawler, E. E. (1968). Managerial attitudes and performance. Florence KY:Dorsey. In Pugesek, B. and Grace, J. (1998). On the utility of path modelling for ecological and evolutionary studies, *Functional Ecology,* 12(5), 853-856.

Quiñones, M. A. (1997). Contextual influences on training effectiveness. *Training for a rapidly changing workplace: Applications of psychological research*, 177-199.

Quiñones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48: 887-910.

Rea, L. and Parker, R. (1992) *Designing and Conducting Survey Research,* First ed., Maxwell Macmillan, San Francisco, California.

Ree, M. J., Carretta, T. R., & Teachout, M. S. (1995). Role of ability and prior knowledge in complex training performance. *Journal of Applied Psychology*, *80*(6), 721.

Rhodes, S. R. 1983. Age-related differences in work attitudes and behavior: A review and conceptual analysis. *Psychological Bulletin*, 93: 328-367.

Rich, B.L, Lepine, J.A., and Crawford, E.R. (2010). Cognitive Engagement Job Engagement: Antecedents and Effects on Job Performance. *Academy of Management Journal*, 53(3): 617–635.

Rich, B.L., Lepine, J.A. & Crawford, E.R. (2010). Job engagement: antecedents and effects on job performance. *Academy of Management Journal*, 53 (3), 617-635.

Richman, A. (2006). Everyone wants an engaged workforce how can you create it?. *Workspan*, *49*(1), 36-9.

Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: a motivational analysis. *Journal of applied Psychology*, *86*(6), 1306-1314.

Roberson, L., Kulik, C.T. and Pepper, M.B. (2009), "Individual and environmental factors influencing the use of transfer strategies after diversity training", *Journal of Group & Organization Management*, 34(1), 67-89.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of management journal*, *38*(2), 555-572.

Rosow, J. M., & Zager, R. (1988). *Training—the competitive edge: Introducing new technology into the workplace*. San Francisco :Jossey-Bass.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal, 2,* 121–139.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, *52*(1), 141-166.

Sablynski, C. J., Lee, T. W., Mitchell, T. R., Burton, J. P., & Holtom, B. (2002). Turnover: An integration of Lee and Mitchell's unfolding model and job embeddedness construct with Hulin's withdrawal construct. In J. Brett, & F. Drasgow (Eds.), *The psychology of work.* Mahwah, NJ:Erlbaum.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, *21*(7), 600-619.

Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progress. *Annual Review of Psychology, 52*, 471–499.

Salthouse, T. (1995). Refining the concepts of psychological compensation. In R. A. Dixon & L. Blackman (Eds.), Compensating for psychological deficits and declines: Managing losses and promoting gains: 21-34. Mahwah, NJ: Lawrence Erlbaum Associates.

Salthouse, T. A. (2000). Aging and measures of processing speed. *Biological psychology*, *54*(1), 35-54.

Schaie, K. W. (1994). The course of adult intellectual development. *American psychologist*, *49*(4), 304-313.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of organizational Behavior*, *25*(3), 293-315.

Schaufeli, W. B., & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationships with efficacy beliefs. *Anxiety, Stress, and Coping*, *20*(2), 177-196.

Schmidt, F. L., Hunter, J. E., & Outerbridge, A. N. (1986). Impact of job experience and ability on job knowledge, work sample performance, and supervisory ratings of job performance. *Journal of Applied Psychology*, *71*(3), 432.

Schwartzman, A. E., Gold, D., Andres, D., Arbuckle, T. Y., & Chaikelson, J. (1987). Stability of intelligence: a 40-year follow-up. *Canadian Journal of Psychology*, *41*(2), 244-256.

Seliger, H. W., Shohamy, E., & Shohamy, E. (1989). *Second language research methods* (Vol. 31). Oxford: Oxford University Press.

Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, *46*(7), 1012-1024.

Smith, M. C., & Reio, T. G. Jr, (2006). Adult development, schooling, and the transition to work. In P. A. Alexander & P. H. Winne (Eds.), Handbook of educational psychology (2nd ed., pp. 115–138). Mahwah, NJ: Erlbaum.

Spector, P. E., & Fox, S. (2005). The stressor-emotion model of counterproductive work behaviour. In S. Fox & P. E. Spector (Eds.), Counterproductive work behavior (pp. 151–174). Washington, DC: American Psychological Association.

Spreitzer, G.M. (1995). Psychological empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal, 38*, 1442-1465.

Stewart, D. J. 1986. The Power of People Skills. New York: J. Wiley.

Strong, L., (2000) "New Skills Legislation replaces apprenticeships." *People Dynamics* 18(5), 15 – 19.

Subedi, B. S. (2004). Emerging Trends of Research on Transfer of Learning. *International Education Journal*, *5*(4), 591-599.

Subedi, B.S. (2004). Emerging trends of research on transfer of learning. *International Education Journal*, 5 (4), 591-599.

Swanson, R. A. (1995). Human resource development: Performance is the key. *Human Resource Development Quarterly*, *6*(2), 207-213.

Swanson, R. A. (1995). Human resource development: Performance is the key. *Human Resource Development Quarterly*, *6*(2), 207-213.

Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43, 399–441.

Tannenbaum, S. I., Mathieu, J. E., Salas, E., & Cannon-Bowers, J. A. (1991). Meeting trainees' expectations: The influence of training fulfillment on the development of commitment, self-efficacy, and motivation. *Journal of applied psychology*, *76*(6), 759.

Tesluk, P. E., Farr, J. L., Mathieu, J. E., & Vance, R. J. (1995). Generalization of employee involvement training to the job setting: Individual and situational effects. *Personnel Psychology*, *48*(3), 607-632.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of Management Review,* 15: 666–681.

Tracey, J. B., Tannenbaum, S. I., & Kavanaugh, M. J. (1995). Applying trained skills on the job: The importance of work environment. *Journal of Applied Psychology*, *80*, 239–252.

Tracey, J.B., Timothy, R. and Mathieu, J.E. (2001), “The influence of individual characteristics and the work environment on varying levels of training outcomes”, Human Resource Development, 12, 5-23.

Trochim, W. M. (2000). *The research methods knowledge base*. Retrieved November 13, 2003, from http://www.socialresearchmethods.net/kb/.

Truss, C., Soane, E., Edwards, C., Wisdom, K., Croll, A. and Burnett, J. (2006) *Working Life:*

Tsai, W.C. and Tai, W.T. (2003), Perceived importance as a mediator of the relationship between training assignment and training motivation. *Personnel Review*, 32, 151-63.

Tuomi-Grohn, T., & Engestrom, Y. (2003). Between school and work: New perspectives on transfer and boundary-crossing.

Utman, C. H. (1997). Performance effects of motivational state: A meta-analysis. *Personality and Social Psychology Review,* 1: 170–182.

Verhaeghen, P., & Salthouse, T. A. (1997). Meta-analyses of age–cognition relations in adulthood: Estimates of linear and nonlinear age effects and structural models. *Psychological bulletin*, *122*(3), 231-250.

Waldman, D. A., & Avolio, B. J. (1993). Aging and work performance in perspective: Contextual and developmental considerations. *Research in personnel and human resources management*, *11*, 133-162.

Wang, G. G., Dou, Z., & Li, N. (2002). A systems approach to measuring return on investments for HRD interventions. *Human Resource Development Quarterly*, 13, 203–224.

Watkins, K. E., & Marsick, V. J. (Eds.). (2003). Make learning count Diagnosing the learning culture in organizations. *Advances in Developing Human Resources, 5* (2).

Weiss, H. M. 1990. Learning theory and industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.), Vol. 1: 171-221. Palo Alto, CA: Consulting Psychologists Press.

Wexley, K. N., & Latham, G. P. (1991). *Developing and training human resources in organizations*. New York: HarperCollins.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, *17*(3), 601-617.

Williams, L.J. & Anderson, S.E. (1991). Job satisfaction and organisational commitment as predictors of organisational citizenship and in-role behaviours. *Journal of Management*, 17 (3), 601-617.

Willis, S. L., & Schaie, K. W. (1986). Training the elderly on the ability factors of spatial orientation and inductive reasoning. *Psychology and aging*, *1*(3), 239.

Wright, J. D., & Hamilton, R. F. 1978. Work satisfaction and age: Some evidence for the 'job change' hypothesis. *Social Forces*, 56: 1140-1158.

Wright, K. (2005) Researching Internet Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services, *Journal of Computer Mediated Communication,* 10(3).

Yamnill, S., & McLean, G. N. (2001). Theories supporting transfer of training. *Human resource development quarterly*, *12*(2), 195-208.

APPENDIX A

Manager Questionnaire

As a busy, working manager you are aware that skills development of your employees can be a critical key both to your organisational productivity as well as their personal careers. However, organizations do not always understand how to design and use training and development very well, especially how to get employees to actually implement training once back in the job.

We are therefore undertaking a study of various training-related issues in the South African environment. We therefore ask that you answer this short survey on these topics. Your participation will help to improve organisational development programs. We will ask the following of you if you agree to help:

We will ask you to identify any one employee under your direct supervision who has (a) served in his/her job for more than one year and, (b) whom you have seen undergo one or more substantial training programs. We will contact your chosen employee and ask him/her to indicate the following details: (a) his/her personal views on various training issues including the extent of training given, and the extent to which the employee felt the training translated to job personal improvements, (b) the employee's levels of job engagement, (c) the employee's views of the innovativeness of the his/her personal work environment, and (c) some non-distinguishing demographics such as gender; In addition to your identification of the employee to contact, we will ask you to (a) briefly rate the extent

to which you have noticed training actually changing the employee's performance, (b) rate the employee's overall performance, (c) give minor overall descriptions of your organisation such as your industry. Ultimately, we hope to identify whether the extent to which employees remain physically fit affects workplace performance and training outcomes. Your participation may help to improve the offerings of organisational wellness programmes, therefore, we ask for your help. Please press next if you are happy to proceed.

Block 4

Please indicate below whether you consent with all the following points regarding this research:

1. You acknowledge that issues identified on the opening page of the survey will be included in the surveys

2. The identities of yourself, the employee and your organisation will be known to the individual researcher and associated research team but used only in aggregated research that does not reveal your identities in any way to any other parties.

3. The intention of this research is exclusively to investigate overall improvements to organisational processes and not to focus on individual employee performance or actions.

Please tick the statement below to agree and proceed:

☐ By ticking this I consent that I have been fully informed of the above points and am content with their contents, and, if necessary, I am authorised to proceed answering this survey.

Block 4

Please choose any employee you know has been in the job for more than a year and has received at least one or

more substantial training programs, whom we may contact and about whom you will answer the rest of this survey.

Your employee's first name

Your employee's surname

Your employee's email address

Block 3

Please answer the following questions regarding training given to your chosen employee in your organisation and job.

Please indicate the extent to which you feel your chosen employee fulfills the following performance criteria:

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	0	10	20	30	40	50	60	70	80	90 100
Adequately completes assigned duties										
Fulfils responsibilities specified in job description										

Performs tasks that are expected of him/her										
Meets formal performance requirements of the job										
Engages in activities that will directly affect his/her performance evaluation										
Neglects aspects of the job that he/she is not obliged to perform										
Fails to perform essential duties										
Helps others who have been absent										
Helps others who have heavy workloads										
Assists supervisor with his/her work (when not asked)										
Takes time to consider co-workers' problems and worries										
Goes out of way to help new employees										
Takes personal interest in other employees										
Passes along information to co workers										
Attendance at work is above the norm										
Gives advance notice when unable to come to work										
Takes undeserved work break										
Great deal of time spent with personal phone conversations										

Complains about insignificant things at work										
Conserves and protects organisational property										
Adheres to informal rules to maintain order										

Please indicate the extent to which you feel the following has been true about the training your employee has received since starting his/her current job:

	Never		Rarely		Sometimes		Often		All of the Time	
	0	10	20	30	40	50	60	70	80	90 100
I notice how training has enabled this employee to use new skills to improve performance.										
I notice how the employee has incorporated skills learned on training into daily work activities.										
I notice how training has helped the employee to improve job performance.										
I notice how the employee has shared knowledge or skills learned in training with others at work										

Block 3

The last section asks for a few minor demographic details. These are used exclusively for research purposes across the entire sample of people responding.

What is your *highest completed* level of education? (Note: if you started studying at a certain level and did not finish please do not tick that level)

- ⃞ Grade 10 of high school
- ⃞ Grade 12 of high school (matric)
- ⃞ Pre-university but post-school diploma (e.g. 1 -year certified diploma in bookkeeping)
- ⃞ University undergraduate degree or BTech
- ⃞ University honours degree (including 4th year of engineering and the like)
- ⃞ Masters Degree
- ⃞ PhD

Please indicate how old you were on your last birthday:

Age in years

Could you indicate your gender?

- ⃞ Male
- ⃞ Female

Could you indicate the primary industry in which your organisation operates?

This is the end of the survey. If you click next below then you cannot come back and edit the information.

- ⃞ I want to end the survey

APPENDIX B

Employee questionnaire

As a busy, working individual you are aware that your skills development is critical both to your personal career as well as to the organisations you work for. However, organizations do not necessarily understand how to design and use training and development very well.

We are therefore undertaking a study of various training-related issues in the South African environment. We therefore ask that you answer this short survey on these topics. Your participation will help to improve organisational development programs.

Your participation in this survey is anonymous to everyone but the researchers, and your data is analysed as part of a whole sample - you are not analysed as an individual.

Please click the next arrow to proceed.

Block 4

Please indicate below whether you consent with all the following points regarding this research:

1. You will be asked to rate levels of personal physical exercise activity, training activity, ratings of training activity and transfer, and personal demographics

2. The identities of yourself, your manager, and your organisation will be known to the individual researcher and associated research team but used only in aggregated research that does not reveal your identities to any other parties. Your manager will not see your responses.

3. The intention of this research is exclusively to investigate overall improvements to organisational processes and not to focus on individual employee performance or actions.

Please tick the statement below to agree and proceed:

☐ I understand and consent to these points

Please identify the manager who recommended you for this survey - remember management does not see your data or identify

Please give your email address

Block 3

Please answer the following questions regarding training given to you in your organisation and job.

Please indicate your estimates of average number of hours of formal training that you have had in the following:

Ave. hours training per week since

you started this job

In addition to formal training, how much *relevant* on-the-job informal training has been given to you since you started this job by supervisors, leaders, managers or relevant skilled co-workers:

	Never		Rarely		Sometimes		Often		All of the Time	
	0	10	20	30	40	50	60	70	80	90	100
Regularity of relevant informal training										

Please indicate on the scale below how much training you felt you *should have received* in order to do your current job well

	None - I came in fully trained		Some limited amounts of training		A moderate amount of training		Quite a lot of training		A great amount of training	
	0	10	20	30	40	50	60	70	80	90	100
The amount of training I feel I would have needed to do my job well										

Please indicate on the scale below how much training you felt you *have in fact* received

	None - I came in fully trained		Some limited amounts of training		A moderate amount of training		Quite a lot of training		A great amount of training	
	0	10	20	30	40	50	60	70	80	90	100
The amount of training I feel I would have needed to do my job well										

Please indicate the extent to which you feel the following is true:

	Not at all			Occasionally				Frequently		
	0 10	20	30	40	50	60	70	80	90	100
I have incorporated skills I have learned on training into daily work activities										
Training has enabled me to use new skills to improve my performance										
Training I have had since starting the job has helped me to improve job performance										
I have shared knowledge or skills learned in training with others at work										

Block 2

Please indicate below the extent to which you believe that your organization has done *worst or better than your relevant competitors* on each of the following innovation-related issues in the last three years:

	Below Competitors			Roughly equal to competitors				Better than competitors		
	0 10	20	30	40	50	60	70	80	90	100
Number of new products/services introduced										
Novelty of administrative systems										
Number of changes in processes introduced										

A general disposition to pioneer new products/services										
Efforts to develop new products / services in terms of hours / person, teams and training involved										
A general disposition to pioneer new processes										
Search for new administrative systems by managers										
Extent to which you have implemented clever responses to new processes introduced by competitors										
A general disposition to pioneer new administrative systems										

Block 5

Please indicate the extent to which you feel the following is true of you in your current job:

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	0 10	20	30	40	50	60	70	80	90	100
I work with intensity on my job										
I am enthusiastic in my job										
At work, my mind is focused on my job										
I exert my full effort to my job										
I feel energetic at my job										

At work, I pay a lot of attention to my job										
I devote a lot of energy to my job										
I am interested in my job										
At work, I focus a great deal of attention on my job										
I try my hardest to perform well on my job										
I am proud of my job										
At work, I am absorbed by my job										
I strive as hard as I can to complete my job										
I feel positive about my job										
At work, I concentrate on my job										
I exert a lot of energy on my job										
I am excited about my job										
At work, I devote a lot of attention to my job										

Block 3

The last section asks for a few demographic details. These are used exclusively for research purposes across the entire sample of people responding, and in no way are meant to identify you or be used in an individual analysis involving yourself.

Please indicate your year of birth:

Can you recall in which year and month you joined your current organisation and started your current job:

	Year Year	Month Month
When you joined current organisation		
When you started current job		

What is your *highest completed* level of education? (Note: if you started studying at a certain level and did not finish please do not tick that level)

- ☐ Grade 10 of high school
- ☐ Grade 12 of high school (matric)
- ☐ Pre-university but post-school diploma (e.g. 1 -year certified diploma in bookkeeping)
- ☐ University undergraduate degree or BTech
- ☐ University honours degree (including 4th year of engineering and the like)
- ☐ Masters Degree
- ☐ PhD

Could you indicate your gender?

- ☐ Male
- ☐ Female

Consider when you first entered this *job*. Please indicate on the sliding scale below how complete you feel your set of knowledge, skills and abilities were at that time for the requirements of the job. This question is asked to help understand training requirements of the job, not to assess you as an individual.

	Poor		Fair		Good		Very Good		Excellent	
	0	10	20	30	40	50	60	70	80	90 100
Your readiness for the requirements of your current job										

Which of the following would best describe your job level?

- ⦰ Senior management
- ⦰ Middle/lower management or professional
- ⦰ Specialist technical
- ⦰ Not management, professional or specialist technical

This is the end of the survey. If you click next below then you cannot come back and edit the information.

- ⦰ I want to end the survey

APPENDIX C

Sample E-mail to managers requesting participation

Dear <Name>

As a South African manager you are aware that skills development can be a critical driver of workplace improvement, but only if employees transfer KSAs learned in training to the workplace. However, all too often training transfer fails to take place. As a Wits Business School endeavour and as part of my MBA, we want to focus on how and when training transfer does exist, and its effects if any. We ask that you answer a very short survey in which we would ask the following of you:

1. We will ask you to identify any one employee under your direct supervision who has (a) served in his/her job for more than one year and, (b) whom you have seen undergo one or more substantial training programs
2. We will contact your chosen employee and ask him/her to indicate the following details: (a) his/her personal experiences of training, including the the employee felt the training translated to job personal improvements, (b) some aspects of the employee's work attitudes including their general engagement and sense that the workplace is innovative, and (c) some non-distinguishing demographics such as gender;
3. In addition to your identification of the employee to contact, we will ask you to (a) briefly rate the extent to which you have noticed training actually changing the employee's performance, (b) rate the employee's overall performance, (c) give minor overall descriptions of your organization such as your industry.

Ultimately, we hope to identify aspects of training transfer that may help us to improve the development of organizations and the South Africa economy in general. Your participation could help in these important aims, therefore, we ask for your help.
Please let me know if we can send you the survey link. If you are indeed happy to respond, would you also be able to nominate the chosen employee now:
Employee's first name:
Employee's surname:
Employee's email address:

Finally, would you be willing to notify the employee involved if we send you an email to forward? We are happy to contact the person ourselves, but your personal support via email would be helpful.

Regards

Sample e-mail that the manager may send the employee requesting assistance

Dear <insert name>

We've agreed to participate in a Wits Business School survey looking at issues surrounding training. This study may help gather evidence on the helpfulness of organizational training in South Africa generally and how to improve it. I've nominated you as one of the participants (I've also had to fill in one). Our organization did not initiate this study, and management will not in any way be shown your responses: only the business school researchers will see your data. Please complete the survey at the following link:
<Insert survey link>

Regards

APPENDIX D

Sample email that will be sent to the employee.

Dear <insert name>
Your manager <insert manager's name> has agreed to participate in a survey exercise that is looking at issues surrounding training. This study may help gather evidence on the helpfulness of organisational training in South Africa generally and how to improve it. <Insert manager's name> has nominated you as one of the participants, and he/she has also filled in a survey. *Note that your organisation did not initiate this study, and management will not in any way be shown your responses: only the business school researchers will see your data.*
In accordance with your nomination by your manager, could you help by completing the survey at the following link:
<Insert survey link>
You will find more details on questions asked inside the survey link.

Regards

APPENDIX E

Research problem stated here					
Sub-problem	**Literature**	**Hypotheses**	**Source data**	**Type of data**	**Analysis**

Research problem stated here					
Sub-problem	**Literature**	**Hypotheses**	**Source data**	**Type of data**	**Analysis**
The first sub problem is to assess the association between training transfer and in-role behaviours, organisational citizen behaviours and counterproductive workplace behaviours as proxies for employee performance.	Baldwin and Ford (1988) Wexley and Latham (1991) Kozlowski et al. (2000) Perkins and Salomon (2001) Ford (1997) (andura, (1986) Tracey et al. (1995) Tannenbaum and Yukl, (1992) Holton et al. (1997) Williams and Anderson (1991) Schaufeli and Salonova, (2007) Fox et al. (2001) Spector and Fox (2005)	H1a : Training transfer is positively associated to in-role behaviours. H1b : Training transfer is positively related to individual focused organisational citizenship behaviour. H1c : Training transfer is positively related to organisation - focussed organisational citizenship behaviour. H1d : Training transfer is negatively related to counterproductive work behaviour.	Appendix A,B and Appendix C	Ratio, Interval, Categorical data	Factor analysis, descriptive statistics, correlation, regression

Research problem stated here					
Sub-problem	**Literature**	**Hypotheses**	**Source data**	**Type of data**	**Analysis**
The second sub problem is to assess the association between employee engagement and in role behaviour, organisational citizenship behaviour and counterproductive work behaviours as proxies for employee performance.	Saks, 2006 Kahn (1990) Mowday et al. (1982) Spreitzer (1995) Simpson (2009) Tracey et al. (1995) Maslach et al. (2001) Schaufeli and Salanova (2007) Kataria et al. (2013) Ryan and Deci (2001) Hopkins (2002) Greco et al. (2006)	*H2a: Employee engagement is positively associated with in-role behaviours.* *H2b: Employee engagement is positively associated with individual-focussed organisation citizenship behaviours.* *H2c: Employee engagement is positively associated with organisation-focussed organisation citizenship behaviours.* *H2d: Employee engagement is negatively associated with counterproductive work behaviour.*	Appendix A and Appendix B	Ratio, Interval, Categorical data	Factor analysis, descriptive statistics, correlation, regression, moderation

Research problem stated here					
Sub-problem	**Literature**	**Hypotheses**	**Source data**	**Type of data**	**Analysis**
The third sub-problem is to assess the extent to which age affects these relationships.	Quinones et al. (1995) Chatman (1991) Griffin and Bateman (1986) Meyer and Allen (1984) Noe (1986) Bandura (1986) Meyer and Allen (1991) Schaufeli and Salanova, (2007)	*H3a: Employee age moderates the relationship between training transfer and employee behaviours such that younger employees will have a stronger relationship.* *H3b: Employee age moderates the relationship between engagement and employee behaviours such that younger employees will have a stronger relationship.*	Appendix A and Appendix B	Ratio, Interval, Categorical data	Factor analysis, descriptive statistics, correlation, regression, moderation

Research problem stated here					
Sub-problem	**Literature**	**Hypotheses**	**Source data**	**Type of data**	**Analysis**
The fourth sub-problem is to examine the impact of tenure on these relationships	Saks (2006) Rich et al. (2010) Spreitzer (1995) Kahn (1990) Tannenbaum et al. (1991) Quinones (1997) Tracey et al. (1995) Ford et al. (1992) Baldwin and Ford (1988)	*H4a: Employee tenure moderates the relationship between training transfer and employee behaviours such that newer employees will have a weaker relationship.* *H4b: Employee tenure moderates the relationship between engagement and employee behaviours such that newer employees will have a weaker relationship.*	Appendix A and Appendix B	Ratio, Interval, Categorical data	Factor analysis, descriptive statistics, correlation, regression, moderation