



An evaluation of the remuneration preferences to retain knowledge workers in an integrated international energy and chemical company

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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ABSTRACT

Topic/theme: This research is an evaluation of the remuneration preferences to retain knowledge workers in an integrated international energy and chemical company using the WorldatWork Total rewards model.

Research Purpose: Organisations could benefit from understanding their employees preferential remuneration benefits, in particular knowledge workers in order to retain them.

Motivation for the research: To understand the remuneration preferences for the retention of a group of knowledge workers within a large organisation based in South Africa. If this research in not conducted in organisations within South Africa, knowledge workers will continue leaving for preferential opportunities else where which will ultimately be detrimental for the future economic growth and development of South Africa.

Research Methodology: Quantitative analysis - The population size was 1229 employees from a junior management role and higher. 199 employees voluntarily participated in the survey. The sample was selected via convenience non-probability sampling. An electronic based questionnaire was developed from the WorldatWork rewards model. The results from the surveys were analysed via various statistical methods i.e. descriptive statistics and inferential statistics.

Main outcomes: There was no significant difference in rewards preferences based on the knowledge workers age, level of performance or number of years of service. There was also no significant difference between the knowledge workers number of years of service and their intention to remain with the organisation. From the analysis there was a significant difference between males and females for benefits, flexibility and performance development preferences.

Contribution and value added: Knowledge workers reward preferences differ based on demographic variables such as gender.

Keywords: Retention, Knowledge workers, Remuneration preferences, Compensation WorldatWork



DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Natasha Brigman

Date



ETHICAL CLEARANCE

Gordon Institute of Business Science University of Pretoria

13 July 2017

Natasha Brigman

Dear Natasha,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

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Kind Regards

GIBS MBA Research Ethical Clearance Committee



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CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 Why was the problem selected?

"The right total reward strategy can deliver the right amount to the right people at the right time, for the right reasons" (Smit, 2013, page 1).

The context of employment is continuously changing with both demographic and economic pressures (Tatoglu, Glaister, & Demirbag, 2016). These include an increasing life expectancy, declining birth rates, the higher flexibility of human capital to relocate through globalisation and the shift towards knowledge based economies (Tatoglu et al., 2016). As globalisation continues to increase the talent available to organisations will also increase. However, the ability to attract, retain and motivate this talent will become harder due to the increased turnover costs which are comprised of loss of corporate memory, productivity and intellectual and social capital. There are different costs associated with losing talented employees (Schlechter, Thompson, & Bussin, 2014). The direct costs include the cost of a new recruite, lost time, recruiting, interviewing, onboarding and the onboarding of the new employee. Costs for losing an employee can be up to 2.5 times the annual salary paid for the job. The indirect financial costs include work disruptions, loss of knowledge, productivity, customers, mentors and even increased employee turnover (Schlechter, et al., 2014).

This research will evaluate the remuneration preferences of knowledge workers within a large integrated international energy and chemicals company based in South Africa.

1.2 What evidence verifies the identification of the problem?

A study done by the Boston consulting group estimated a worldwide shortage of knowledge workers of approximately 60million by 2020 (Pobst, 2014). Various studies have indicated that there will be a general shortage of knowledge workers especially in the technically orientated fields (Pobst, 2014). Considering the forecasted shortage of knowledge workers in the future talent management strategies and retention are vital areas to ensure organisations have the skills required in the future. Another article resounded similar sentiments of the forecasted shortage of skills in the next 15 years particularly in the age bracket of 35 to 45 years. It is anticipated that the growth for demand in this bracket will increase by 25% whilst the supply of labour will decrease by 15% which results in a 40% shortfall of skills if no action is taken (Dawn & Biswas, 2013). Employers are forced to compete to gain the talent and skills that are required to accomplish the organisations strategic objectives. An excess supply of labour is no longer available to camouflage ineffective human resource strategies (Dawn & Biswas, 2013).



Retaining knowledgeable employees is vital to the continual success of an organisation (Balakrishnan & Vijayalakshmi, 2014). Organisations struggle to compete effectively to be the employer of choice. "Employee retention is more than rivalling your competition with higher wages. It's about creating a work environment that nurtures diversity and mutual trust, providing challenging career opportunities, and treating people with respect and appreciation" (Balakrishnan & Vijayalakshmi, 2014, page 69). Employee's leaving is both costly and disruptive as the cost of an employee leaving, recruitment and training new employees is often higher than the total cost of the annual salary for the job (Bryant & Allen, 2013). In addition to the high cost of losing an employee has other effects such as work disruptions, loss of valuable organisational knowledge, strategic knowledge, loss in productivity, loss of mentors, diminished diversity and turnover contagion most likely will occur (Bryant & Allen, 2013; Schlechter, Thompson, et al., 2014).

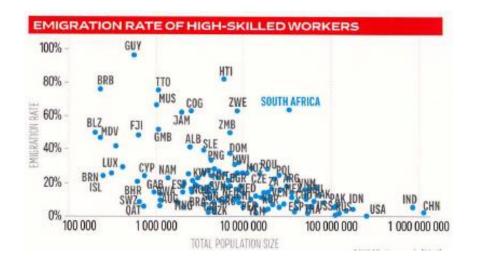
In addition to the losses that accompany the turnover of knowledgeable employees, South Africa is suffering from a major skills shortage especially in technical fields such as engineering (Rasool & Botha, 2011). According to Coetzee, Mitonga-Monga and Swart (2014) the 2014 draft of the South African National Scarce Skills list showed that engineering skills are one of five highly scarce resources required for economic growth. The high skills shortages and turnover of highly skilled people in technical fields in South Africa is a major contributor to the lack of economic growth and low availability of jobs. This skills shortage further limits South African businesses to participate globally. Rasool and Botha (2011) reaffirms that despite the number of educational reforms South Africa still faces considerable skills shortages which have been a major obstacle to economic growth and job creation. In 2007, the Engineering Council of South Africa (ECSA) estimated that 300 qualified engineers immigrate from South Africa per year. South Africa has a large number of its knowledge workers leaving which will eventually disable the economy from competing globally (Coetzee et al., 2014; Rasool & Botha, 2011).

A study was done to evaluate the turnover of middle and senior managers in the South African pharmaceutical industry where the authors describe knowledge as a "commodity" as skilled workers or knowledge workers are required for organisations to succeed (Khoele & Daya, 2014). The loss of knowledge workers especially in senior positions has a detrimental effect on the effectiveness and profitability of an organisation. "High staff turnover is a cause for alarm, not only because of the costs associated with recruitment, selection and training, but also due to the increasing scarcity of experienced talent" (Khoele & Daya, 2014, page 1). Knowledge workers represent an organisations competitive advantage and the loss of these workers not only results in monetary and knowledge loss but also the unavailability of experienced talent to replace them. South Africa is experiencing a skills crisis in general and



retaining knowledge workers is difficult due to their unique attributes. This "scarcity of skills stimulates the open competition for talent and drives turnover higher" (Khoele & Daya, 2014, page 5). A lack of an inclusive environment and obstacles for advancement have been shown to increase the turnover rate (Khoele & Daya, 2014).

Globalisation has enabled knowledge workers greater flexibility and higher mobility in the recent years and in a survey done in large South African organisations it was found that global mobility resulted in 21% of the total turnover (Khoele & Daya, 2014). According to the article written on the impact of highly skilled migrants "knowledge elites", which are engineers, scientists and inventors, increase the productivity in the location that they are in thereby resulting in extraordinary economic growth (Fourie, 2016). Prosperous economies such as the US have attracted highly talented individuals such as Elon Musk (Tesla) and Jan Kaum (Whatsapp) as this is an economy these individuals can use to develop their innovations. The article highlights that knowledge workers are more mobile and between 1990 to 2010 the number of migrants with a tertiary degree increased by 130% whilst those with a primary education only increased by 40%. Seventy percent of these highly knowledgeable migrants relocate to countries such as the US, the UK, Canada and Australia. The article also indicated that Africa and Asia experience the highest number of skilled female emigrants potentially due to gender inequality and labour market challenges. South Africa had the 6th highest emigration rate for highly skilled individuals in 2010 as shown in Figure 1: Emigration rate of highly skilled workers in South Africa in 2010(Fourie, **2016).** South Africa is a clear outlier with a rate of emigration of knowledge workers 3 times higher than an average country with a similar population (Fourie, 2016). This statistic should be a concern considering that the rate of the country's economic growth is dependent in the retention of knowledge workers within South Africa.







The conclusion from this Finweek article: "If SA is to prosper, high-skilled individuals should be recruited and retained – not pushed to find opportunities elsewhere" and "In the knowledge economy, knowledge elites are the bedrock of success. If we are to learn from history, cultivating them should be our number one priority" (Fourie, 2016, page 4).

1.3 What is the relevance of this topic?

Retaining knowledge workers is vastly different than traditional workers as they do not seek life-long employment and security rather they seek skills development and advancement opportunities (Pobst, 2014). These types of employees are vastly in demand as having their skills can result in an organisations competitive edge. Retaining employees is not about updating compensation structures and having salaries higher than in the market as only money incentives at employees is expensive and could potentially not get the desired result (Bryant & Allen, 2013). South Africa is in dire need to retain the knowledge and experience that has been cultivated within the country. Various studies have estimated that the replacement cost of losing a knowledgeable employee can potentially be up to 150% of the yearly salary of the job (Theron et al., 2014). The loss of individuals includes both mental and irreplaceable consequences such as a loss of information, practical know-how, disrupted productivity, lower morale and additional stress (Theron et al., 2014). There is limited research done on the reasons for why people stay or why people leave an organisation in developing countries (Theron et al., 2014). The retention of knowledge workers is essential for the organisation to achieve its key strategic intentions (Theron et al., 2014).

Michaels and Risher (1999) presented the paper on "The War for Talent" done by McKinsey on the recruitment and retention of high performers. Execution and leadership have been defined as fundamental components to winning in the market place. Both of these components are reliant on humans. "Having the right people doing the right things in the right places at the right time" (Michaels & Risher, 1999, Page 8). The talent forecast particularly in the higher skill and executive levels is expected to decline thereby making this issue a higher priority (Michaels & Risher, 1999). The survey done showed the number of the top 200 executives who intensely agreed with their companies in various categories. The results showed only 23% of them believed the company hired highly talented people, 3% believed the company developed employees efficiently, 16% knew who their high and low performing employees where, 10% retain almost all their high performers and 3% remove low performers efficiently (Michaels & Risher, 1999).

According to the Finweek article focused on tertiary education "Knowledge and high-level skills are critically important for any country's economic growth and standard of living"



("Knowledge (and expertise) is power," 2007). This is because this will ensure the successful production of goods and services, a higher institutional capacity, efficient public sector, stronger civilian community and a positive investment environment. The article goes on to describe that South Africa has a huge skills shortage in several areas due to the emigration of skilled workers and several other factors. Whilst the number of skilled workers educated in South Africa needs to increase, the actual retention of the existing skill needs to be managed("Knowledge (and expertise) is power," 2007).

A study done on knowledge workers in a Korean conglomerate on turnover intentions showed a significant negative correlation between contextual factors (perceived organisational support, development feedback and job complexity) and turnover intentions (Joo, Hahn, & Peterson, 2015). The study recommended that human resource practices within an organisation has a vital part in retaining these knowledge workers particularly with regards to the organisational culture, job satisfaction and employee development(Joo et al., 2015).

Continuity management can be defined as the "preservation of corporate knowledge to endure employee turnover with minimal and limited organisational loss" (Jayasingam et al., 2016, pg 267). This statement expresses the importance of preventing knowledge loss and the importance of spreading knowledge within an organisation to retain the value. This philosophy of encouraging knowledge sharing actually enables organisations to recover when an important knowledge worker does leave the organisation. The problem with the concept of sharing knowledge is that many knowledge workers actually consider their knowledge as a form of power resulting in a conflict to share this information in order to retain their value within the organisation (Jayasingam et al., 2016). The conundrum in this situation is that knowledge workers are actually the most mobile of all employees which exposes organisations to even additional risk of knowledge loss and loss of competitive advantage.

Organisations could benefit from understanding their employees preferential remuneration benefits, in particular knowledge workers in order to retain them. Talent management systems need to be implemented to gain a competitive advantage through retaining talent to execute the strategic intent of the organisation efficiently. The demand for talent is high sue to the skills shortage currently being experienced in South Africa especially in the leadership, senior management, technical and engineering fields. Losing knowledgeable employees has a cost impact from both replacing the employee and attempting to rebuild the knowledge lost.



When battling with the question of why people leave a job, pay is often one of the first two reasons. Remuneration and benefits are not the only retention methods and for an organisation to successfully retain their talent. Retention strategies need to transcend purely monetary and other benefits (Bryant & Allen, 2013). Retention should be the number one strategy prioritised in talent management because the cost of recruitment far outweighs the cost of retention especially for scarce skills and critical skilled positions (Pobst, 2014). The demand for these types of skills makes it difficult to attract, retain and manage these skilled and scarce employees but organisations need these skills to maintain their competitive advantage.

South Africa is faced with a greater problem of employee turnover due to the low supply of knowledge workers due to increased emigration and the lower standards of education. The Employment Equity Report in 2004 indicated that the turnover rate between races significantly differed. White males turned over at a rate of 9.35% compared to Africans, males and females, at 29.8% and other previously disadvantage groups ranking at 14.1%. This result may potentially be the result of the Employment Equity act of 1998 as organisations are recruiting to meet the legislation. It was further found that this legislation had significant impacts on the psychological contracts of all groups with regards to faithfulness and career progression. African male managers were found to have the highest turnover rate due to the demand for them in the South African market as the Legislation made them a wanted commodity (Wöcke & Heymann, 2012).

According to research that was done on the impact of demographic variables on voluntary labour turnover in South Africa it was found that various demographic variables such as age, race and gender do influence individual turnover decisions (Wöcke & Heymann, 2012). It was further found that level of education influences mobility greater than race. With regards to gender affecting employee turnover, it was established that the turnover trends of highly educated women resemble the turnover of men far more than that of less educated women. Various researches have indicated that men are paid a higher salary than women for similar job categories and the "glass ceiling" in promotion opportunities for women also lead to high turnover rates (Wöcke & Heymann, 2012). South Africa has the added problem of lack of access to educational facilities for previously disadvantaged groups which impacts the skilled workforce. The lack of skills and the Employment Equity act has significant contribution towards employee retention amongst different groups within South Africa (Wöcke & Heymann, 2012).

The problem experienced by organisations is that the best mechanisms to retain and attract talent are not well understood. Organisations incur significant costs including direct costs in reduced productivity, replacement costs, development costs and indirect costs such as



reduced employees, disruption to business activities when key and senior employees leave (Wöcke & Heymann, 2012). In the future the demand for talented employees will far outweigh the supply at all levels within all industries. The following trends regarding retention of talent currently seen such as (Dawn & Biswas, 2013):

- 1) Approximately one-third of business failures can be attributed to poor hiring practice and the inability to attract and retain the correct talent
- 2) The cost of replacing an employee is up to 3 times the cost of the person being replaced
- 3) There is a large cost associated with working around underperformers
- 4) The cost of not attracting and retaining good talent has an number of side effects which cannot be quantified including decreased productivity, lower employee morale and reputational damage

All of these factors reinforce why organisations need to have their retention and talent development strategies in place to retain knowledge workers. Understanding what remuneration preferences are favoured by knowledge workers could enable organisations to retain them. In a previous study investigating total rewards that retain states that employees who have the flexibility of a reward package aligned to their preference are more inclined to be loyal to the organisation (Pregnolato, Bussin, Schlechter, Town, & Africa, 2017).

1.4 Problem statement

In an ideal situation organisations should fully understand the needs of their employees in terms of remuneration preferences. Organisations should understand if their target type of employees would move jobs based on purely monetary compensation or do they prefer additional benefits such as flexible working arrangements, safety and security at the work place, a work-life balance, recognition, personal development or various other remuneration options. This is important particularly to retain knowledge workers as the cost associated with replacing this knowledge far outweighs the cost of retaining them.

The problem is that in reality organisations do not necessarily understand what remuneration preferences are valued by employees. In large organisations investigating each individuals preference is a time consuming task which may not be a priority to the organisation. This results in knowledge workers, who are vital to the organisations acheivement of its strategy



and maintaining its competitive edge, leaving because their reward preferences where not known.

Despite the lack of sufficient knowledge workers in South Africa, organisations fail to recognise the importance in retaining the employees they have. If organisations continue to operate in this way knowledge workers, who have much higher levels of mobility, have alternative options to either move to another organisation within South Africa or to leave South Africa. With the increased move towards globalisation organisations no longer only face a threat of their knowledge workers moving within the region they operate instead they now compete for knowledge workers globally.

The aim of this research "An evaluation of the remuneration preferences to retain knowledge workers in an integrated international energy and chemical company" is to understand the remuneration preferences for retention of a group of knowledge workers within a large organisation based in South Africa. If this research in not conducted in organisations within South Africa, knowledge workers will continue leaving for preferential opportunities else where which will ultimately be detrimental for the future economic growth and development of South Africa. Understanding how to incentivise and reward employees via the total reward factor model will retain knowledge workers and increase the attractiveness of working at the organisation. Various studies of the total rewards factors have been done in many of the different fields but none particularly in a large South African International Energy and Chemicals company. This study will provide information for large companies such as this to ideally combine the total rewards factors to attract and retain knowledge workers.

1.5 Brief outline of the document to follow

This report will document a Literature Review defining the WorldatWork Total rewards model, knowledge workers, remuneration, turnover, retention and talent management to fully understand the scope of this study. The research methodology describing the sample, quantitative analysis to be done and sample questionnaire will be discussed. Finally the report will end with the survey analysis and discussion, conclusions and limitations and assumptions for this paper.



CHAPTER 2: LITERATURE REVIEW

The literature review will discuss the most recent literature relating to this research. The section begins with defining the WorldatWork Total rewards model. The most recent literature on knowledge workers, remuneration, turnover, retention and talent management is then discussed to fully understand the scope of this research.

2.1 Total Rewards: WorldatWork

"An organisation that offers attractive remuneration packages to employees shows their employees that they do matter to the organisation, which consequently enhances their emotional bond with the organisation" (Coetzee et al., 2014, Page 7).

A reward is considered to be a significant tool to attract, stimulate motivation and ensure the retention of employees (Bussin, Rooy, & Africa, 2012). The "total rewards programme" includes rewards of monetary value and rewards that are non-monetary. Monetary rewards comprise of basic and variable pay and ownership of shares. Other benefits are included in non-monetary rewards. Employees may focus on rewards that are monetary based but their behaviour is influenced by the non-monetary rewards. The model of total reward is made up of six elements: Compensation, benefits, work-life effectiveness, performance management, recognition and talent development as shown in Figure 2. The development and implementation of a total rewards strategy that acknowledges individual differences has some challenges but can be extremely beneficial (Schlechter, Faught, & Bussin, 2014). There are various benefits of the total rewards model which places emphasis on an employees's needs and preferences. These include according to Schlechter, Faught, et al., (2014):

- Deeper impact: The employee relationship can be enhanced with the multiple impact of financial and non-financial rewards increasing the employees motivation and commitment
- Increased engagement: Allowing employees to customise their package increases their engagement and positive reflection of the organisation and its values
- Flexibility: Increasing flexibility, which is a relational reward, binds individuals more strongly to the organisation because the organisation is catering to the employees individual needs
- Winning talent: Non-monetary rewards positively entice a psychological contract. This enables the organisation to become the employer in demand which leads to both attracting and retaining talent



The WorldatWork total rewards model was chosen for this study as this model is a globally recognised and one of the most commonly used models in reward management. The WorldatWork association is affiliated with leading Fortune 500 organisations and various other organisations worldwide (Christofferson & King, 2006). The association has in excess of 50 years of research which has been used to develop and test the total rewards model. The WorldatWork total reward model has four layers:

- 1) External influences
- 2) Business strategy, organisational culture and human resources strategy
- 3) Total rewards strategy
- 4) Result

The organisation has little or no control over external influences but this will have an effect on the sustainability of the business. "Total rewards is the near-universal form of exchange worldwide between an employee's talent, effort and skills and the employer's ability to attract and retain the needed skills to accomplish its mission. Thus, total rewards becomes the crucial intersection between the supply and demand for labour" ("Worldatwork Total Rewards Model," 2015). The human resources and total rewards strategy should be based on the organisation's business strategy. Both organisational culture and business strategy are driven by external influences but these drive the design and execution of the human resource strategy.



WorldatWork. Total Rewards Model

Figure 2: Worldatwork total rewards model ("Worldatwork Total Rewards Model," 2015)

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The total rewards strategy comprises six elements where each element has specific sequences, practices, areas and dimensions that define an organisations strategy to motivate, retain and engage employees ("Worldatwork Total Rewards Model," 2015).

2.1.1 Compensation and Benefits

Compensation is where an organisation pays for services rendered by employee including both fixed and variable. Benefits include additional benefits such as health, income protection, savings and retirement. Compensation is the wage or salary that is paid to an individual based on the services that have been rendered (Idris, Hamzah, Sudirman, & Hamid, 2017). Financial compensation can be divided into two components. Direct financial compensation is cash payments in terms of either a salary or a wage and other benefits such as bonuses and commissions. The difference between a salary and a wage is a salary is a guaranteed payment paid periodically to individuals whilst a wage is paid based on the work that was agreed on at payment (Idris et al., 2017). Indirect financial compensation refers to benefits such as employee insurance, medical aid assistance, pension fund contributions and any other benefit that an organisation provides to an employee.

A study was done to test the effect of financial and non-financial remuneration on lecturer's performance and professionalism in Asia (Idris et al., 2017). The results of the study showed that both financial and non-financial remuneration had a significant impact on the lecturers professionalism. The study further showed that financial compensation had a positive effect on the lecturers performance but non-financial compensation did not (Idris et al., 2017).

Research done on understanding the impact of Financial rewards on talent attraction for knowledgeworkers showed that remuneration had the highest impact on the attractiveness of a job compared to increased benefits and variable pay (Schlechter, Hung, et al., 2014). It was also found that demographic variables such as gender, race and age had no significant impact on the outcome of this result. From this research it shows that job attractiveness for knowledge workers is directly linked to Financial rewards, specifically remuneration or compensation (Schlechter, Hung, et al., 2014).

2.1.2 Work-life Effectiveness

Work-life effectiveness can be defined as organisational practices, policies and programs that support employees achieving success both at work and home. A study done evaluating the impact of work-life balance on the performance of Spanish listed companies showed that enabling work-life balance activities into an organisation benefited the organisation in terms of talent retention, higher employee engagement, higher productivity, lower costs and overall better business results (Benito-Osorio, Munoz-Aguando, & Villar, 2014). For organisations wanting to attract and retain skilled talented employees who are highly motivated and committed, work-life balance practices need to be implemented which would ultimately lead



to a higher return on investment (Benito-Osorio et al., 2014). Work-life balance also includes recreational activities, studies, travel, sport, personal development and leisure.

2.1.3 Recognition

Recognition can be described as the acknowledgement of employee actions, efforts, behaviour and performance both formal and informal. It is a part of the non-financial compensation that can be provided to employees and includes recognising achievements, promotion opportunities and providing development (Idris et al., 2017). A survey done asking employees to value various rewards resulted in non-financial rewards being placed higher than financial rewards (Idris et al., 2017).

2.1.4 Performance Management

Performance management is the synchronisation of organisational, group and individual objectives to meet the business objectives. It is the establishment of expectations, skills, assessment and feedback and improvement. Performance feedback has been shown to significantly improve performance (Idris et al., 2017). Another definition of performance management can be defined as a process of identifying, quantifying and developing an individual or a team continuously (Cascio, 2014). The individuals or teams performance goals must also be aligned with the strategic goals of the organisation. Performance management is not only meant to provide the goals for an employee but also give direction. Performance management should ideally be more than just a yearly review, it should be a daily occurance of a high-performing organisational culture (Cascio, 2014). Effective performance management can be achieved by performing these activities on a regular basis (Cascio, 2014):

- Goal setting and communication of expectations
- Regular feedback and performance reviews
- Performance improvement plans to enable employees to reach their potential

2.1.5 Talent Development

Talent development is the support of skills development for employees to advance their competencies for both short and long term. Effectively deploy talented employees to enable them to deliver the greatest value to the organisation. This is further discussed under Talent Management in section 2.5.

2.1.6 Benefits of WorldatWork

Providing compensation and benefits only does not make a retention strategy. The utilisation of the WorldatWork model will result in a workforce that has the right people in the right jobs who are motivated and engaged and are loyal to the organisations success ("Worldatwork Total Rewards Model," 2015).



From a study done on the total rewards benefits that retain employees it was found that the respondents considered financial rewards as the most important factor in their compensation (Pregnolato et al., 2017). Financial rewards are comprised of the following in the order of preference Benefits, Performance and Recognition, Remuneration and Career. The next most important rewards where Career Advancement, Learning and Work-life Balance (Pregnolato et al., 2017). It was found that the younger generations listed Work-life balance much higher than older generations.

2.2 Knowledge Workers

According to Schlechter, Thompson, et al. (2014) the term of "knowledge worker" was popularised by Peter Drucker in 1986 where he described a knowledge worker as a person who contributes productively to work via their ideas, concepts and knowledge rather than by manual labour. Knowledge workers can be defined as employees who have specialty knowledge within their area of expertise and by applying this knowledge they can benefit the organisation in making informed decisions on complex matters (Jayasingam et al., 2016). The business landscape has progressively become more competitive over the years as businesses attempt to gain the competitive edge over their competitors. Theory on the knowledge based view and information economics indicated that knowledge workers are actually tangible assets which are strategically important resources that facilitate the establishment of a competitive advantage (Jayasingam et al., 2016).

Knowledge workers deal with complex problems where their daily tasks are unpredictable, multi-disciplinary and not usually a task that is repetitive. This type of job requires the knowledge worker to utilise their mental abilities as their work has limited structure and cannot necessarily be standardised. Knowledge workers has also been described as a worker who applies theoretical and analytical knowledge they have acquired through formal education to produce new products and services. Their higher degree of expertise shift the bargaining power in their favour as they seek less dependence on their employer as they can seek employment elsewhere. The harsh reality is that knowledge workers leaving results in loss of organisational knowledge which can be highly costly to an organisation especially if this employee is highly skilled and talented (Jayasingam et al., 2016).

A study to examine the factors that influence affective organisational commitment within knowledge workers was done considering the following five factors: Organisational culture, autonomy, value identity within the workplace, promotion execution and management support (Jayasingam et al., 2016). The knowledge worker sample in the study was from the manufacturing, retail and services industry. The study found that both value identity within



the workplace and having a knowledge-sharing culture are vital components in influencing affective organisational commitment(Jayasingam et al., 2016). For this research knowledge workers at different levels of the organisation will be the sample population. Knowledge workers have been a vital component of successful organisations globally by enabling a competitive edge (Schlechter, Thompson, et al., 2014).

2.3 Turnover

Employee turnover can be defined as the number of employees that permanently leave positions within the organisation. Turnover can either be voluntary or involuntary. Voluntary is by resignation and involuntary is by dismissal or retrenchment. Voluntary turnover can either be functional were a poor performer resigns or dysfunctional were a valued employee resigns (Khoele & Daya, 2014). There have been various factors that contribute to employee turnover including the characteristics of an organisation, the economic climate and industry conditions or "market-related pull factors" as well as personal factors. During better economic conditions the number of jobs available increases (Khoele & Daya, 2014).

Knowledge worker of the 21st century display different characteristics than before. These workers display high levels of mobility, realise that their skills are highly demanded and do not aim to have a job for a life time. This change in behaviour greatly impacts the way in which retention needs to be managed. The study done by Khoele and Daya (2014) describes this change as "moving from tending a dam to managing a river: the aim is not to prevent water from flowing, but to control its direction and speed" (page 2).

South Africa is experiencing a skills crisis in general and retaining knowledge workers is difficult due to their unique attributes. This "scarcity of skills stimulates the open competition for talent and drives turnover higher" (Khoele & Daya, 2014, page 5). A lack of an inclusive environment and obstacles for advancement have been shown to increase the turnover rate (Khoele & Daya, 2014). From the study done within the South African pharmaceutical industry three major factors can be defined:

- 1. Industry
- 2. Organisational
- 3. Personal

Organisational themes:

• Manager relationship – this relationship is a key variable as this determines an employee's experience within an organisation and ultimately the length of time a knowledge worker will remain with an organisation. This relationship not only

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impacts employee turnover and retention, it also impacts the employee's performance within the organisation. More supportive managers subordinates outperform a less supportive managers subordinates (Khoele & Daya, 2014). Information from exit interviews conducted show that respondents who had left due to their relationship with their manager sited lack of communication, no direction or feedback and lack of agreement on their development (Khoele & Daya, 2014).

 Organisational culture – defined as "a pattern of shared basic assumptions that are learnt by the group, that work when applied in problem solving and are taught to new members as the correct way to interact and solve problems" (Khoele & Daya, 2014, page 6). It has been shown that a positive organisational culture has a significant positive correlation to employee commitment and lower turnover. The study done by Khoele and Daya (2014) further proved this and found that organisational culture is more important than monetary gains when trying to improve retention and decrease turnover. Up to 80% of turnover decisions are associated with an organisations culture (Khoele & Daya, 2014).

Personal themes:

These factors were rated as the most important areas a person considers when deciding to remain with an organisation or not. When an employee feels that the work they are doing has a purpose and meaning and is contributing value to the organisation it decreases employee turnover (Khoele & Daya, 2014).

Career development – Knowledge workers continually search for development and advancement opportunities, lateral or upward, within their organisation. The research done by Khoele and Daya (2014) has clearly shown that knowledge workers will leave if they cannot advance within their organisations. Organisations that focus on fostering growth and development will have lower turnover rates. Both advancement opportunities and long-term career development are key pillars in the retention and loyalty of knowledge workers (Khoele & Daya, 2014). Employees would not seek alternate external areas for challenges and opportunities for advancement if their organisations actively participated in their progression. This is especially true for talented employees seek development opportunities rather than monetary gain. Knowledge workers develop themselves through education versus waiting for company training.

The research done by Khoele and Daya (2014) has shown that there was a distinct difference in the respondents thinking and perceptions on employee turnover below and above 40 years of age. The group below 40 years were not afraid to change jobs to ensure



they could advance in their career development and growth. Whilst the group over 40's main concern was to have job security and a pension fund. The average age of the leavers in the study were 34.5 years and the stayers 45.2 years. Age has been shown is some research to have an impact on retention and turnover with younger employees tending to leave whilst older employees stay (Khoele & Daya, 2014). There is also a correlation between the number of years an employee is with an organisation versus their retention. The longer an employee is with an organisation the more likely they are to remain (Khoele & Daya, 2014).

The study done on knowledge workers affective organisation commitment showed that knowledge workers who displayed a high level of organisational commitment are less likely to leave an organisation and perform better at work in comparison to employees who have low levels of organisational commitment (Jayasingam et al., 2016). Therefore employees with high organisational commitment have lower turnover intentions. Bryant & Allen (2013) concluded on 35 predictors of individual turnover decisions from hundreds of studies. Level of pay was the 24th strongest relationship with turnover. Pay satisfaction showed the 27th strongest relationship with turnover. Pay satisfaction are relatively weak predictors of individual turnover decisions (Bryant & Allen, 2013). The following categories of predictors are more strongly related to turnover (Bryant & Allen, 2013):

- The withdrawal process employees start to have turnover intentions and start to search for alternative suitable jobs. They experience psychological and behavioural changes. The employer needs to intervene prior to the employee obtaining a new job.
- Key job attitudes job satisfaction and organisational commitment. Job satisfaction is a
 positive emotional state which results from ones job and organisational commitment is
 the employee's psychological bond to the organisation. Organisations need to assess
 both these with measures and evidence that can be validated. Measurements should be
 more frequently done in order to link the individual responses with important outcomes.
 More frequent assessments individually give more time to plan directed interventions.
 Substantial trust is required within the workforce for this methodology to work or an
 outside consultant can be used to collect, analyse and interpret the data.
- The work environment relates to leadership, design of work and relationships with co-workers. The phrase "people don't leave companies; people leave bosses" can be substantiated with evidence (Buckingham, 1999, page 1). "The strength of the relationship employees have with their immediate supervisor is one of the most consistent predictors of turnover" (Bryant & Allen, 2013, Page 173). In terms of work design both role clarity and role conflict are strong predictors of turnover. When there is lack of clarity regarding role expectations individuals can experience stress and dissatisfaction which leads them to more likely quitting. Expectations need to be clearly



communicated and supported by leaders. Opportunities for growth and advancement would result in lower employee turnover. Organisations need to proactively manage career paths to create internal opportunities. Leaders need to communicate to their employees regarding these opportunities. Relationships with co-workers, satisfaction with co-workers and group cohesion are strong predictors of individual turnover decisions. Creation of opportunities to interact and foster cohesion should be encouraged. Retention can be embedded into new comers by using experienced staff to create a feeling of being a part of the organisation.

When battling with the question of why people leave a job, pay is often one of the first two reasons (Bryant & Allen, 2013). Remuneration and benefits are not the only retention methods and for an organisation to successfully retain their talent. Retention strategies need to go beyond purely compensation and other benefits. There are factors of remuneration and benefits that affect employee turnover which according to Bryant and Allen (2013) include:

- Remuneration structure: Wide gaps between the lowest and highest paid employees increases the probability of employee turnover (this is also referred to as the wage gap)
- Compensation procedures: Employees experience higher levels of satisfaction when pay procedures relates to their perceptions of organisational support which decreases the likelihood of employee turnover.
- Types of Compensation: Share options and share awards have been shown to reduce executive turnover. Companies that provide benefits such as insurance and retirement benefits have similarly decreased levels of employee turnover.
- The perceived justice and impartiality in remuneration: This is important in inducing employee's loyalty and reducing turnover. Higher levels of perceived fairness reduce turnover.
- Linking compensation and benefits vesting schedules: Long term stock option benefits impact employee turnover. Employees need vesting schedules that are sufficiently long to make it worth staying but sufficiently short to enable some motivation.

From research on why individuals leave organisations, it has been reported that there are many levers beyond remuneration and benefits which are vital in an organisation's employee retention management strategy (Bryant & Allen, 2013). Pay level and pay satisfaction are not strong predictors in employee turnover. The strongest indicator of employee turnover is the withdrawal process. The reasons why high performers and low performers leave an organisation can be differentiated as there are internal and external factors that contribute to their decisions (Trevor, 2001). High performers leave due to internal factors such as perceived pay and opportunity for advancement whilst low performers leave more due to



their relationship with their supervisor. External factors such as negative experiences lead low performers to leave where as high performers are most likely to leave due to alternative offers and new job advancement (Trevor, 2001).

South Africa is faced with a greater problem of employee turnover due to the low supply of knowledge workers due to increased emigration and the lower standards of education. According to research that was done on the impact of demographic variables on voluntary labour turnover in South Africa it was found that various demographic variables such as age, race and gender do influence individual turnover decisions (Wöcke & Heymann, 2012). It was further found that level of education influences mobility greater than race. The age of employees has been shown via various research studies to have an impact on employee commitment, job embeddedness, employee's psychological contract and turnover decision. This could be a result of employees prioritising different aspects of their lives job vs. personal as they age. The study done also indicated that younger employees are more eager to leave (Wöcke & Heymann, 2012).

The Employment Equity Report in 2004 indicated that the turnover rate between races significantly differed. White males had a turnover rate of 9.35% compared to African males and females at 29.8% and other previously disadvantage groups ranking at 14.1%. This result could be explained by the Employment Equity act of 1998 as organisations strive to meet the requirements of the legislation. It was further found that this legislation had significant impacts on the psychological contracts of both designated and non-designated groups with regards to loyalty and career development. African male managers were found to have the highest turnover rate due to the demand for them in the South African market as the Legislation made them a wanted commodity (Wöcke & Heymann, 2012).

With regards to gender affecting employee turnover, it was found that the turnover patterns of highly educated women resemble the turnover of men far more than that of less educated women. Various researches have indicated that men are paid a higher salary than women for similar job categories and the "glass ceiling" in promotion opportunities for women also lead to high turnover rates (Wöcke & Heymann, 2012). South Africa has the added problem of unequal access to education for disadvantaged groups which impacts the skilled workforce. The combination of skills shortages and Employment Equity has an impact on employee turnover between different designated groups within South Africa (Wöcke & Heymann, 2012). The study found that gender, age and race influence employee turnover. Employee race does not have an influence on employee mobility whereas level of education does (Wöcke & Heymann, 2012).



Push factors can be defined as a factor that is internal to the employee which influences an employee's turnover decision (Wöcke & Heymann, 2012). Pull factors are more orientated towards job alternatives available in the market. The study found that males were more likely to turnover due to pull factors whereas females most likely left due to push factors. This is most likely due to the differences in the psychological contracts between males and females. Both age and race where influenced by both push and pull factors (Wöcke & Heymann, 2012). Turnover is influenced by these amongst other factors: prevailing economic conditions, organisational culture, manager relationship, personal values and growth (Khoele & Daya, 2014).

2.4 Retention

Employee retention is comprised of a number of structured activities which results in attracting employees especially talented employees to stay with the organisation (Schlechter, et al., 2014). Crucial retention factors combined with a well-defined human resource planning, recruitement and selection process are required to ensure the organisation has a functioning retention strategy. There are different levels of retention. A continuance commitment which is an employee needs to stay, a normative organisational commitment where an employee is obliged to stay and affective organisational commitment where employees choose to stay with an organisation. Organisations need to strive for the latter affective organisational commitment as this type of commitment produces a workforce that is motivated as they have an emotional bond with the organisation (Jayasingam et al., 2016). "Employees with high affective organisational commitment have the desire or intention to continue working with a particular organisation, and this becomes of great importance when employees are talented or knowledge workers that organisations want to retain" (Jayasingam et al., 2016, pg 268).

Hausknecht, Rodda, and Howard (2009) developed a content model of 12 retention factors to investigate why employees choose to stay with a particular employer. From their reseach of just under 25000 employees the most frequently measured reasons for remaining with an organisation included job satisfaction, extrinsic rewards, constituent attachments, organisational commitment and organisational prestige. High performers generally cited advancement opportunities and organisational prestige and low performers generally cited extrinsic rewards as their reason for staying with their current organisation (Hausknecht et al., 2009). This highlights the importance of properly aligning the human resource practices to achieve the goal of retaining valuable employees. The content model of employee retention is comprised of the following 12 "Retention Factors": Progression prospects, constituent attachments, extrinsic rewards, flexible hours, investments, job fulfilment, no



other option, geographic ease, social factors, loyalty, organisation fairness and reputation (Hausknecht et al., 2009).

Organisational culture is considered a strong handle to create a workforce that is engaged and committed including HR practices that represent culture (Coetzee et al., 2014). Prior work done has suggested that organisational culture and human resource philosophies, comprising of conduct of leadership, managing performance, development, remuneration and communication influences employee fulfilment, organisational commitment and retention probability. This organisational commitment has been researched to indicate that it can lead to increased organisational effectiveness, improved performance and decreased turnover of employees (Coetzee et al., 2014). Rewards and remuneration relates to the employees' perceptions of their remuneration being relative to the market and relevant to their job specification where fair rewards affect organisational commitment (Coetzee et al., 2014). Research that has been done links the rewards for high outputs positively to the influence on employee satisfaction and increased loyalty. Perceptions of fairly distributed rewards and fairness increase satisfaction leading to long-term commitment and loyalty to the organisation (Coetzee et al., 2014).

Michaels and Risher (1999) surveyed 200 managers to determine why a talented person would work for a company. 58% of the respondents rated values and culture as the most critical factor in attracting and retaining top talent. Freedom and autonomy 56%, exciting job challenges 51% and a well manage company 50%. Remuneration rated at 20%. The core value propositions of a great company (brand), great jobs (products) and competitive compensation (price) were the most important (Michaels & Risher, 1999).

Retention should be the number one strategy prioritised in talent management because the cost of recruitment far outweighs the cost of retention especially for scarce skills and critical skilled positions (Pobst, 2014). The demand for these types of skills makes it difficult to attract, retain and manage these skilled and scarce employees but organisations need these skills to maintain their competitive advantage. The best retention strategy for these elite-expertise workers and high-performing employees is the ability to re-recruit them before they get a better offer from another organisation. This re-recruitment process includes having regular discussions and feedback sessions with top performers to ensure they realise their value to the organisation and their future opportunities and remain engaged (Pobst, 2014).

Affective organisational commitment is made up of three dimensions being affective commitment, continuance commitment and normative commitment. Affective commitment occurs when an employee wants to be employed by the organisation. Continuance commitment occurs when an employee needs to be employed and normative commitment



occurs when an employee feels they ought to remain with an organisation (Jayasingam et al., 2016). Knowledge workers are in high demand so the need to remain with an organisation or continuous commitment is not there. Knowledge workers also continuously seek self-advancement opportunities so they lack a sense of obligation towards an organisation or normative commitment. Knowledge workers have the power to decide if they want to remain with an organisation or leave. If they feel that they are gaining the advancement and have the work opportunities that satisfy their needs they will most likely remain committed to the organisation. All three of these types of commitment are important but organisations want to instill affective commitment in their knowledge workers and talented employees to retain them within the organisation. Affective organisation and reflects the strength of the employee's identification with the organisation (Jayasingam et al., 2016).

The study conducted on the factors attributing to affective organisational commitment amoungst knowledge workers included the following six influencing parameters: Knowledgesharing practices, task prientation, compensation, performance management and promotion, management support and training and development. Knowledge-sharing refers to a culture that encourages individuals to share knowledge thereby enabling a creative, comfortable, innovative learning environment(Jayasingam et al., 2016). Fair distribution of promotions, career development and organisational rewards have been shown to have an impact on employees organisational commitment. Poor performance management has been shown to negatively impact knowledge workers commitment as knowledge workers seek recognition for their contributions. Employee development efforts such as scholarships provided for career advancement gain employees commitment which leads to a higher probability of retention. Employees who feel that they have organisational support are more likely to have higher levels of affective organisational commitment (Jayasingam et al., 2016).

The factors that influence affective organisational commitment may also be effected based on gender as males and females have different behavioural tendencies. Women lean towards a knowledge-sharing culture as this assists with networking and communication. Women may have different reasons for remaining within an organisation and the glass ceiling effect may exacebate some of the variables in the study due to gender inequalities. Female knowledge workers level of affective organisation commitment may be influenced due to these inequality factors so measuring responses from males and females will be important for the study(Jayasingam et al., 2016).

Senior management's main role is to define employee value proposition by understanding why talented employees would want to come and work for their team versus another team. Poor performers actually reduce team morale and entices further poor performance. Inorder



to build a reputation as an employer of choice organisations need to reduce the poor performing employees and retain the high performing employees. Being an employer of choice enables organisations to recruit the best knowledge workers and actually existing employees spread the word to other potential recruits(Pobst, 2014) . There are various factors that contribute to employee retention including employee engagement. Some studies have indicated that employees have a higher level of engagement when their managers provide them regular feedback and communicate regularly. These studies also indicated that more engaged employees where more likely to stay with an organisation than less engaged employees.

There are a few key areas that should be managed to best retain top talent (Bryant & Allen, 2013):

- Pay dispersion is an important factor for employee morale
- Communication of processes on pay decisions need to be done clearly
- Pay raises and cash bonuses are not the only levers for retention management
- Compensation and benefits need to be determined and administered fairly and equitably
- Long-term vesting schedules should be leveraged reasonably when providing benefits and compensation

Organisations should consider managing and assessing employees' flexibility to move, job search motivations and turnover intentions (Bryant & Allen, 2013). Organisations need to assess and manage both job satisfaction and organisational commitment as this is a strong predictor of employee turnover. Well-developed measures should be done more frequently to link individual responses to individual behaviours and outcomes. The relationship between the employee and their immediate supervisor is an important predictor in employee turnover (Bryant & Allen, 2013). All management should undergo leadership development training and leaders should be held accountable to show how they have managed to retain talent. Employees who have role expectations that are clearly defined, low conflict in their role and opportunities for growth and development are less inclined to leave an organisation. It is imperative that managers of high-valued employees have communicated and develop career paths. Employees that have relationships which are positive within the organisation are less inclined to leave (Bryant & Allen, 2013).

Some basic principles should be kept in mind when developing employee retention strategies: Recruit the right people the first time, employee empowerment, value employees, provide employees with the correct information and knowledge, provide feedback, recognition, encouragement and create a safe environment where work and fun can be achieved (Balakrishnan & Vijayalakshmi, 2014).



The Michaels and Risher (1999) study defines four imperatives a company needs to embrace in order to acquire and keep top performers. The imperatives are:

- 1) Winning value proposition,
- 2) Talent mind set,
- 3) Robust sourcing strategy and
- 4) Tactics to build the talent pool.

The top quintile companies remunerated their top performers much higher than average ones and encouraged individual performance via their pay programs. Differentiated remuneration was the key to encouraging individual performance (Michaels & Risher, 1999). Leaders should be held accountable to ensure they retain high quality employees. To instil a talent mind set the right behaviours need to be instilled such as candour, differentiation and consequence management. The top rated companies rated higher on the following process dimensions rather than on formal reviews (Michaels & Risher, 1999):

1) Having the improvement of the talent-pool in the top 3 priorities,

2) Senior management spending significant time on people management and

3) Corporate Officers having influence over a significant number of positions.

The third imperative is knowing what you are looking for as the profile of the talent needs to be known in order to best match the characteristics of the business. Personal characteristics between high and low performers include dimensions such as orientation toward achieving results, willingness to innovate, risk-taking and controlling of company resources (Michaels & Risher, 1999). This type of talent can be found not only within a company but also externally. Arrow Electronics quote: "We want the best people regardless of where they come from and we are prepared to bring them in" (Michaels & Risher, 1999, Page 9).

Michaels and Risher (1999) defined tactics as the fourth imperative as jobs and feedback drive development. Stretch developmental jobs, feedback and mentoring are more important than formal education. 360 feedback together with good examples of employees, understanding areas of strength and weakness and participating in coaching sessions are all essential activities. Higher performing companies seem to be more likely to give high potential candidates a number of better development opportunities and they place high performing people in positions before they are ready to be in those positions (Michaels & Risher, 1999). Top performing companies retain their key talent by placing them in jobs that are exciting, by ensuring their talent feel engrained in the organisation, by paying higher for



performance and encouraging performance. They ensure underperforming employees are not positioned in key roles as this can be demoralising and has many costly implications including: blocked development and advancement opportunities, team's underdeveloped, low productivity and morale in groups, lower performance of individuals and higher performers leave and fewer talented people are attracted to the company. "Take ownership of top talent, change the review process and take action on developmental needs" (Michaels & Risher, 1999, Page 10).

The relationship between talented employees commitment and HR practices comprising of leadership, development, rewards and remuneration and job satisfaction in an engineering environment was researched (Coetzee et al., 2014). The main outcome of rewards and remuneration was that fair practices need to be established inorder to gain employees commitment. Remuneration packages should be related to the employees job specifications. The package should be performance based and relative to the market. Employees should have the required training to ensure they can perform their jobs well as this will increase their job satisfaction. Challenging work that entices job satisfaction further commits the employee to an organisation. In addition the study shows that rewards entice employee commitment, where remuneration refers to both monetary and non-monetary benefits (Coetzee et al., 2014).

Engaged skilled employees are critical to any organisations success as retaining talented employees leads to a sustained competitive edge in the long term (Joo et al., 2015). The organisational equilibrium theory of turnover is referenced in the study where organisational equilibrium is a reference to the balance between an individuals contribution in an organisation versus the inducements the individual receives from the organisation. This equilibrium is affected by the individuals satisfaction within their work environment and the availability of jobs in the market and the individuals employability (Joo et al., 2015).

Other studies done suggest the following reasons for turnover:

- 1) Demographic factors
- 2) Organisational commitment and job satisfaction
- 3) Organisational fairness and culture

From these studies it is clear to see that an individuals turnover decision is affected by both organisational and demographic factors (Joo et al., 2015). Organisational factors include supervisor support, work environment, work culture, fairness of the organisation which all affect an employees commitment towards the organisation which ultimately influences their turnover decision. In the study done for knowledge workers it was found that contextual factors such as perceived organisational support, development, feedback and job complexity

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was a stronger predictor of employee turnover intention than personal factors such as core self-evaluations and proactive personality (Joo et al., 2015). This study also concluded that employees with challenging fulfilling jobs have a lower intention to leave.

2.5 Talent Management

Talent management has been described as a human resource strategy within an organisation that "seeks to acquire, develop, deploy and retain talented and high potential employees" that have a high potential to succeed within the organisation (Dawn & Biswas, 2013, page 41). Talent within the organisation refers to a core group of employees including leaders that enable the business strategy and drive the organisation to reach its potential. Talent refers to the core competencies required within the organisation which is held by a small percentage of employees (Dawn & Biswas, 2013). Talent can be described as an individual's natural capacity and ability; possessing a high aptitude for mental and artistic tasks (Dawn & Biswas, 2013). There is a lack of a consistent definition of what "Talent Management" means and there are at least three different ways of defining it in practice (Ariss, Cascio, & Paauwe, 2014):

1) Talent management is used as a new term for existing or old HR practices,

2) As another term for sucession planning, or

3) The management of talented employees in general.

There is no universal definition of Talent Management nor what the aim or scope of the architecture should entail (Ariss et al., 2014). From literature a major challenge that has been highlighted is the failure of organisations to effectively manage the talent of their employees despite the amount of care paid to the recruitment of them (Ariss et al., 2014).

What is a talent management architecture and is there benefit to this for the organisation? According to Sparrow and Makram (2015) a talent management architecture comprises various systems together with processes and practices which have been created and executed by an organisation to effectively manage talent. The "Value" resides within the abilities, unique skills, motivation and knowledge which is ingrained within an organisation's talent. An organisation can implement strategies to maximise the value gained by leveraging its inhouse valuable and non-substitutable talent thereby achieving a sustainable advantage over competitors (Sparrow & Makram, 2015).

How does the implementation of a talent management architecture create value for the organisation? Value is created at an organisational level when organisations can exploit their own resources and capabilities in order to execute strategies which can result in market opportunities which will enable economic value and higher organisational performance



(Sparrow & Makram, 2015). Four concepts of value are defined by Sparrow and Makram (2015): 1) Value creation, 2) Value capture, 3) Value leverage and 4) Value protection.

Procedures are required for ensuring proper talent management and are vital pillars in the development of a talent management structure. Value creation is the process of attracting, acquiring and accumulating worthy and distinctive talented resources and develop their ability to create value. Value capture is the process by which an organisation packages their talented employees to increase their reliance on the organisation. Value leverage is where the organisation utilises and develops its talent to enhance value creation. Value protection is where an organisation implements mechanisms to prevent its talented resources from being captured by other organisations or competitors (Sparrow & Makram, 2015).

A talent management process is not complete without having a strategy to enable that talents progression and retention (Dawn & Biswas, 2013). This is an important area to manage as usually one third of an organisations cost is towards its workforce. Key talented employees should have tailored development plans as this is an essential component in maintaining their motivation and retaining them (Dawn & Biswas, 2013). Developing existing staff is also much more cost effective than hiring the talent externally. Providing these career development opportunities internally will have a positive effect on the employees job fulfilment and affective loyalty to the organisation which will ultimately lead to the retention of these talented employees (Dawn & Biswas, 2013).

2.6 Research Objective

For this research the total rewards model will be used to evaluate the remuneration preferences of a sample of knowledge workers within a large international energy and chemical company based in South Africa. Understanding how to incentivise and reward employees via the total reward factor model will retain knowledge workers and increase the attractiveness of working at the organisation. Various studies of the total rewards factors have been done in many of the different fields but none particularly in a large South African International Energy and Chemicals company. This study will provide information for large companies such as this to ideally combine the total rewards factors to attract and retain knowledge workers.

Chapter 2, the literature review, has discussed the most recent literature relevant to this research. The section defined the WorldatWork Total rewards model and the most recent literature on knowledge workers, remuneration, turnover, retention and talent management to fully understand the scope of this research. The next Chapter 3 will discuss the hypothesis to be tested in this research. These have been developed from the information presented in Chapters 1 and 2.



CHAPTER 3: HYPOTHESIS

The aim of this research "An evaluation of the remuneration preferences to retain knowledge workers in an integrated international energy and chemical company" is to understand the remuneration preferences for retention of a group of knowledge workers within a large organisation based in South Africa.

Chapter 2, the literature review, has discussed the most recent literature relevant to this research. The section defined the WorldatWork Total rewards model and the most recent literature on knowledge workers, remuneration, turnover, retention and talent management to fully understand the scope of this research. From the literature review various themes have been developed. Each of the hypotheses are drawn from these themes and discussed below.

Chapter 3 will now discuss the hypothesis to be tested in this research which has been developed from the information presented in Chapters 1 and 2.

3.1 Total Rewards preference for knowledge workers

There were mixed results regarding the knowledge workers remuneration preferences in the literature review in Chapter 2. In this research the Total Rewards model which comprises of both financial and non-financial components was used to test remuneration preferences of the knowledge worker sample within the international energy and chemicals company based in South Africa. From the literature review it was discussed that both financial and non-financial rewards affect the retention of employees. Some studies showed that knowledge workers have a preference of talent development versus compensation. Some studies have shown that the preferred reward for employees is compensation. In the questionnaire, respondents questioned on each of the Total rewards pillars:

- 1) Compensation
- 2) Benefits
- 3) Work-Life effectiveness
- 4) Recognition
- 5) Performance management
- 6) Development and Career opportunities

Hypothesis 1: Knowledge workers rate rewards differently based on their age

Hypothesis 2: High preforming knowledge workers (performance rating excellent performer E) value rewards differently than lower performing knowledge workers (full performer F)



3.2 Retention

The literature review pointed to an interesting result that the longer an employee remains with an organisation, the less likely they are to leave the organisation. This could be attributed to many factors including their commitment to the organisation, their family commitments, the lack of jobs available in the market and various other factors. For this study we can measure the number of years the employee has worked for the organisation versus how many years they intend to continue working for the organisation. The exact reason for why they have chosen to stay would not be known.

Hypothesis 3: Knowledge workers working at the same organisation for a long period of time rate their preference to remain with the organisation differently compared to knowledge workers with shorter service

3.3 Demographic variables

The literature review focused on the impact of the participant's age, family status and gender on their total rewards preferences.

From the literature review some research found that the turnover rate is higher with younger employees within an organisation compared to older employees. Some of the research alluded to the fact that older employees prefer stability especially if they are closer to retirement so they would be less inclined to leave the organisation. The literature also showed that younger employees are more focused on their career development and are willing to move between organisations to get the development they seek.

Hypothesis 4: Younger age groups of knowledge workers differ in preference to leave the organisation compared to older knowledge workers

In the literature review many studies showed the difference between reward preferences for males and females. One of the studies showed that more educated women tended to follow the same turnover pattern as males. There could be many reasons for the difference in rewards preferences from female requiring more work-life effectiveness due to family commitments, females experiencing the "glass ceiling" in the organisation therefore choosing more development rewards or a host of other reasons. This study will determine their preference and not necessarily why this is their preference.

Hypothesis 5: The total rewards preferences will differ between male and female knowledge workers



The previous chapters provided the following information: Chapter 1 outlined and discussed the research problem. The energy and chemical industry is experiencing low cash flows and many organisations are operating on cost saving and cost reduction philosophies. This has led to large volumes of retrenchments worldwide and employees from the energy and chemical industries moving into alternative industries such as the banking and finance sector. This research can have a significant impact in enabling employers in the energy and chemicals industry to retain their knowledge workers with alternative benefits and maintain their current cost saving strategies with the current low oil price environment. In times of cost reduction organisations need to implement strategies to retain their core talented competence as when the economy turns, these resources will be required to revitalise the organisation and meet their strategic goals. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers.

This chapter (Chapter 3) outlined the hypothesis to be tested in this research. The next chapter (Chapter 4) will discuss how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured.



CHAPTER 4: RESEARCH METHODOLOGY

The previous chapters provided the following information: Chapter 1 outlined and discussed the research problem. The energy and chemical industry is experiencing low cash flows and many organisations are operating on cost saving and cost reduction philosophies. This has led to large volumes of retrenchments worldwide and employees from the energy and chemical industries moving into alternative industries such as the banking and finance sector. This research can have a significant impact in enabling employers in the energy and chemicals industry to retain their knowledge workers with alternative benefits and maintain their current cost saving strategies with the current low oil price environment. In times of cost reduction organisations need to implement strategies to retain their core talented competence as when the economy turns, these resources will be required to revitalise the organisation and meet their strategic goals. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlines the hypothesis to be tested in this research.

This chapter is to discuss how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured.

4.1 Choice of Methodology

There are differing approaches to research deductive and inductive. In quantitative research a close-ended stance is taken by identifying the variables and selecting the data collection instruments prior to starting the research (Creswell, 2012). Therefore for quantitative research the research questions and hypothesis do not change during the course of the research whereas for qualitative research a more open-ended approach is used which allows the changes to be made in during the course of the research being more deductive and qualitative research to be more inductive. Therefore this quantitative study was deductive as the hypothesis and data collection instrument was set prior to the collection of data before the research beginning. Deduction is a research approach which follows five sequential stages in order to test the theoretical proposition with the designed research strategy to perform this test (Saunders & Lewis, 2012). These five steps are:

- 1) Define the Research Questions from literature
- 2) Specify the way the questions may be answered
- 3) Seek the answers to the questions in step 1



4) Analyse if the results supports the theory

5) Either confirm the theory or provide a modification based on the results

There are various differing types of research studies such as exploratory, descriptive and explanatory. A descriptive study or research seeks to definitively describe persons, events or situations. The responses for this type of study are quantitative and involve the collection of measurable, quantifiable data (Saunders & Lewis, 2012). In quantitative data collection an instrument which is a tool for measuring, observing or documenting quantitative data must be used. This instrument contains specific questions and response possibilities that are developed in advance (Creswell, 2012). The following methods are generally used in descriptive research:

- Questionnaire surveys
- > Sampling
- Interviews
- Reanalysis of secondary data

A survey can be defined as a research strategy that involves the structured collection of data from a sizeable population where the data collection instrument may take the form of questionnaires, structured observations or structured interviews (Saunders & Lewis, 2012).

The research methodology followed was a quantitative method in order to reach the head office based population of approximately 1200 people in a junior management role and higher within a large integrated international Energy and Chemicals company based in South Africa. Quantitative research utilises information from questionnaires and statistically interprets the data obtained whereas in qualitative research trends and opinions have to be interpreted to extract common themes from the respondents. The major characteristics of quantitative research is that the researcher identifies a particular research problem based on trends noticed and tries to find an explanation of the relationship amongst the variables (Creswell, 2012).

Mono-methodology of only quantitative analysis was used for this study as information was only collected at one point in time due to the time constraints to perform a mixed methodology analysis. This research was therefore cross-sectional where a cross-sectional research can be defined as a study of a specific phenomenon at a specific point in time (Saunders & Lewis, 2012). A cross-sectional or 'snapshot' study was conducted as data was collected from participants during one period of time due to the time constraints of this research. Provision is made in the structured survey for commentary if the options provided



per question are not in line with the respondents answer. The information from this was used as a measure to indicate if there was a critical option missing from the options provided and to gain more understanding on areas potentially missed in the structured questionnaire. The information gathered from this qualitative information will be used to highlight the restrictions and limitations of this research and potentially highlight research areas to be studied in the future. The independent variable is the factors in the total rewards programme and the dependent variable is the employee retention preferences.

Research philosophy can be defined as an overall term that relates to the development of knowledge and the nature of knowledge dependent on the nature of the research (Saunders & Lewis, 2012). For this quantitative study a pragmatist research philosophy is followed as this philosophy argues that the most important determinant of the research philosophy adopted are the research questions and objectives (Saunders & Lewis, 2012).

Purpose statements, research questions and hypotheses developed for quantitative research is also specific, narrow, measurable and observable. Chapter 3 has outlined the hypothesis to be evaluated for this research. The numeric data was retrieved from a large number of employees using the questionnaire which was pre-developed from the information gathered in the literature survey. For a quantitative research a large number of responses are required and some literature indicated that on average only a 10% response rate should be expected. The number of surveys distributed for this research was in excess of 1200 participants in a junior management role and higher. For ease of distribution and to maintain confidentiality an electronic survey platform was utilised. This type of distribution has some risks associated with it such as potentially a lower response rate but for the timelines of this research this methodology was seen as the most convenient.

The research strategy that was used for this research was a structured survey which was tailored to answer each of the hypotheses proposed in Chapter 3 from the research done in the literature survey in Chapter 2 prior to collection of data. The surveys were electronically distributed to the desired sample population.

4.2 Population

The participants in this study were 1229 employees from a large South African based integrated international Energy and Chemicals company. These employees were all based in the South African head office and all performed a role category from a junior management level to higher. Since all of the employees are in a junior management role category or higher, these employees are considered as knowledge workers. There were no restrictions



placed on the age of the participants or their number of years of service within the organisation.

4.3 Unit of analysis

Units of analysis is data or individuals that the research wants to understand conclusions about (Balnaves, Mark; Caputi, 2001). The unit of analysis can either indicate to groups or individuals with a particular characteristic. So the unit of analysis is a group of employees who are knowledge workers within the head office of a South African based company. All of these employees were from different business operating entities within the company and they were regarded as knowledge workers which has been defined in the literature review: Knowledge workers can be defined as employees who have specialty knowledge within their area of expertise and by applying this knowledge they can benefit the organisation in making informed decisions on complex matters (Jayasingam et al., 2016). These employees are relevant as sampling a wide range of employees from different backgrounds and demographics will assist in understanding the different effective retention strategies. Evaluating their reasons for staying and the impact of different remuneration benefits would result in the applicable retention strategies that should be implemented within the organisation in order to retain them.

4.4 Sampling Method and Size

The number of employees in this research sample size extends to 1229 employees based at the head office in South Africa. Non-probability sampling was utilised as the researcher had no process to ensure that each part of the population could be present in the sample (Saunders & Lewis, 2012). Convenience sampling was used as the population was readily available to the researcher. Participants were therefore selected via convenience non-probability sampling for this research.

The numeric data was retrieved from a large number of employees using a structured questionnaire which was pre-developed from the information gathered in the literature survey in Chapter 2. For a quantitative research a large number of responses are required and some literature indicated that on average only a 10% response rate should be expected (Zhang, 2000). The number of surveys distributed for this research was 1229 participants in a junior management role and higher. For ease of distribution and to maintain confidentiality an electronic survey platform was utilised. This type of distribution has some risks associated with it such as potentially a lower response rate but to maintain confidentiality this was seen as the best distribution methodology.



4.5 Measurement Instrument

The online survey comprised closed-ended questions where a sample questionnaire is shown in the Appendix. Ratings will then be done using a five point Likert-type scale where 1 is extremely negative and 5 is extremely positive. The questionnaire was focused around the WorldatWork total reward strategy model indicated in Figure 2. Biographical information such as age, gender, highest academic qualification, level of work, race, job level, number of years with the company, number of years foreseen at the company and family status was queried (Smit, 2013). Employees were notified of the purpose of the survey and their information was kept confidential.

The survey was split into these sections as per the sample questionnaire in Appendix:

- 1) Cover letter of consent
 - a. Reason for research was provided
 - b. The time to complete the survey was indicated
 - c. Notifying the participant that their participation is voluntary and they can withdraw at any time
 - d. Provision of the researchers and research supervisors contact details
- 2) Demographic information
 - a. Age/Gender/Race
 - b. Highest academic qualification
 - c. Marital and family status
 - d. Job level
 - e. Number of years with the company
 - f. Length of time the participant intends to continue working for the organisation
 - g. Last merit rating
 - h. Operating Model entity within the organisation
- 3) Retention preferences
 - a. Compensation
 - b. Benefits
 - c. Work-Life balance
 - d. Performance management and recognition
 - e. Development and career opportunities
 - f. Ranking of the most important factors that will influence the respondents retention decision

A test survey was conducted with participants not in the specified sample to ensure the survey was valid and reliable to answer the relevant research questions. The test survey was also conducted to ensure the participants had no technical errors with the survey and it

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was easily accessible with the company firewalls etc. The test sample chosen was a group of participants who met the knowledge worker criteria but the operating business entity preferred for their whole workforce to not participate in the main survey as an internal survey to particular areas within that operating entity was being conducted at the same time as this research survey. The test survey participants were a sample size of 10 respondents with whom a verbal discussion on the usability and ease of the survey was enquired as well as on the clarity of the questions. The respondents effected no significant changes to the survey enabling the researcher to distribute the survey to the wider audience.

Caution must be noted for online surveys as there a advantages as well as disadvantages (Zhang, 2000). Some of the advantages that can be noted are online surveys are quicker and cheaper to collect data, the target population has the convenience to complete the survey at their leisure, the survey can reach outlying remote areas, questionnaires are more objective as the same process is followed for generation of the data and this is an effective method to survey a large quantity of people (Smit, 2013). The disadvantages that were noted include that the respondents may be uncomfortable with the online survey or have no access to the internet, the respondent may answer superficially and the questionnaire is standardised so there is some limitations for explaining complex points (Smit, 2013).

4.6 Data gathering process

Data collection is a process to collect of the realities and views from the respondents which is then recorded for reference and analysis (Saunders & Lewis, 2012). The survey was initially piloted to correct any ambiguities. The pilot questionnaires will be excluded from the final results. There are various methods of distributing questionnaires including face-to-face, telephonically, postage or via online platforms (Saunders & Lewis, 2012). Each of these methods has both advantages and disadvantages. Face-to-face and telephonically has the advantage of being able to understand the participants frame of mind and additionally being able to ensure they understand the intention of the question. This method however is time consuming and to survey 1229 participants at their convenience would take a significant number of hours. Sending surveys by mail would be less time consuming for the research but would consume some time for the participant to fill out the survey and repost it.

There are various advantages and disadvantages for using online based surveys. The following advantages and disadvantages where described by Zhang (2000):

Advantages for data collection:

- Less time consuming
- Lower cost
- > Participants can answer the survey at a convenient time



- > Questions are standardised therefore more objective responses received
- Can survey a large group
- > Can easily reach participants in remote areas

Disadvantages for date collection:

- > Discomfort of participants with the online platform
- > Inability for participants to access the internet
- Superficial answers
- > Inability for participants to clarify their understanding of the questions

The online platform which was the chosen distribution methodology for this survey was the most convenient and efficient way to distribute the large number of surveys to the specified population. The target population all have access to the internet and have computer facilities at their disposal which removes some of the disadvantages listed with online surveys. The online survey allows participants to fill in the survey at a time suitable to their schedule and at their leisure. The disadvantage of this platform is that the participant cannot clarify their interpretation of the question with the researcher but space for commentary has been allocated after each question if the participant wishes to write what their thoughts where at the time of taking the survey. The commentary is not required but available for participants who need to use it. An electronic survey of the sample questionnaire in the Appendix was distributed to 1229 employees from a junior management level to higher at the South African based head office of a large international Energy and Chemicals company. The number of respondents to the electronic survey was 199. Participation in this research was completely voluntary and no pressure or rewards were provided to any of the participants. The survey was open for a period of 3 weeks with one reminder to complete the survey during the 3 week period.

4.7 Analysis approach

The results from the surveys were analysed via various statistical methods. Descriptive statistics and frequencies were analysed together with inferential statistics. Similar research in this field of evaluating the Total Rewards framework utilised these research methodology analysis approach (Smit, 2013). The research done on the total rewards that retain utilised the same research analysis approach to determine the reward preferences of employees (Pregnolato et al., 2017).

A Cronbach Alpha analysis and Factor analysis was done after the results were received to verify the reliability of the questions and reduce the number of variables (Bussin et al., 2012). This will be further detailed in the data analysis in Chapter 5.



4.7.1 Defence of tests

4.7.1.1 T-test

The independent samples t-test was used when there were only 2 groups in the positions category to analyse for differences. The samples were independent as there was no second set taken at a different time. The independent samples t-test was done for hypothesis 2 and 5.

Limitations and assumptions of test

Limitations: Independent samples t-test can only test 2 groups at maximum (Chiba, 2015).

Assumption 1: One dependent variable is measured continuously

Assumption 2: One independent variable consisting of two categorical groups

Assumption 3: Independence of observations

Assumption 4: No significant outliers in terms of the dependent variable in the two groups of your independent variable.

Assumption 5: Dependent variable is normally distributed for each of the groups of independent variables

Assumption 6: Homogeneity of variances is assumed

Null hypothesis (H_0): the population means of the two groups are equal *Alternate hypothesis* (H_1): the population means of the two groups are not equal

4.7.1.2 ANOVA

An analysis of variance (ANOVA) test was done as there where more than two groups to understand the differences. A one-way ANOVA analysis is done to determine the significant differences of 3 or more independent groups (Chiba, Tests for Differences, 2015). A one-way ANOVA test was done for hypothesis 1, 3 and 4. These statistical tests are used to determine:

1) Whether there are differences between two or more groups; and

2) If such differences exist, determine where these differences lie when you compare more than two groups.

The key however, is that these tests of difference are based on the comparison of the mean scores between the different groups that you are interested in.



Limitations and assumptions of test

Limitations: This method allows one to evaluate if two groups are significantly different from but falls short in determining which specific groups are significantly different. Therefore an ANOVA is combined with a post-hoc analysis. The following assumptions are assumed to not be violated (Chiba, Tests for Differences, 2015, Pg 29):

Assumption 1: One dependent variable continuously measured

Assumption 2: One independent variable at least three or more categorical, independent groups

Assumption 3: Independence of observations

Assumption 4: In terms of the dependent variable there are no significant outliers in the two groups of the independent variable

Assumption 5: For each group of independent variables, the dependent variable is normally distributed

Assumption 6: The variance is equal in each group meaning homogeneity of variances.

Hypotheses:

Null hypothesis (H_0) – All group population means are equal *Alternate hypothesis* (H_1) – At least one group population mean is different

4.8 Limitations

- Participants answer truthfully
- The survey was sent out only once therefore only providing a snapshot at a point in time
- Participants understood the requirements of the questionnaire. A sample group was used to ensure there were no major problems with the questionnaire.
- All participants in the population had access to the online platform

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 will provide the results of the statistical analysis that was done on the online survey responses.



CHAPTER 5: RESULTS

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 will provide the results of the statistical analysis that was done on the online survey responses.

5.1 Description of the sample obtained

An online survey was sent out to 1229 knowledge workers based at the head office of an international integrated Energy and Chemicals company. A total of 199 responses were received. The description of the sample is outlined in this section.

	Range	Participants	Result
	Below 29	10	
	30 to 35	44	
	36 to 39	32	
			Mean = 41.7
	40 to 45	46	Oten dand Deviation 0.0
Age (years)	46 to 49	33	Standard Deviation = 8.2
	40 10 49		Minimum = 26
	50 to 55	19	
			Maximum = 62
	56 to 59	13	
	Above 60	2	
	Total	199	

5.1.1 Age

Table 1: Description Data of Sample - Age



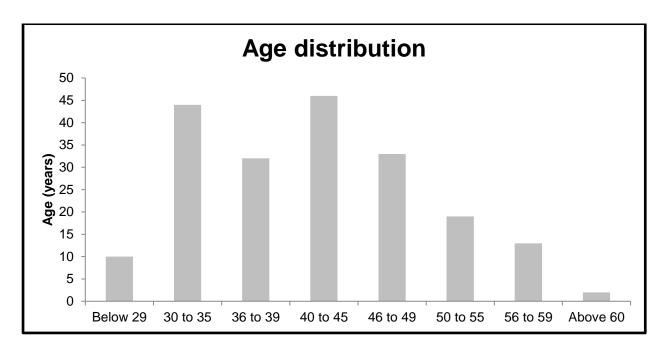
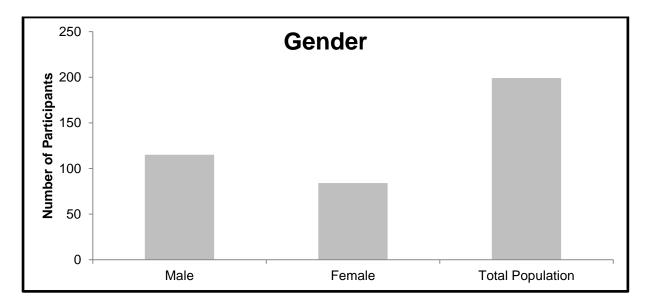


Figure 2: Descriptive data - Age

5.1.2 Gender

Table 2: Description Data of Sample - Gender

	Sample	Participants
Conder	Male	115
Gender	Female	84
-	Total	199





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5.1.3 Race

Table 3: Description Data of Sample - Race

	Sample	Participants
	African	41
	Coloured	12
Race	Indian/Asian	41
	Chinese	1
	White	101
	Other	3
	Total	199

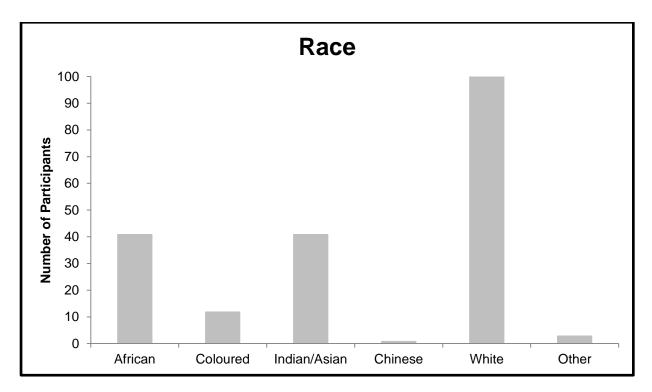


Figure 4: Description Data of Sample – Race



5.1.4 Qualifications

Table 4: Descriptive Sample Data - Qualifications

	Category	Participants
	Grade 12 or lower	0
	Certificate or diploma	9
Highest Academic qualification	Bachelor's degree	55
	Post graduate degree	133
	Other	2
	Total	199

5.1.5 Marital Status

Table 5: Descriptive Sample Data - Marital Status

	Category	Participants
	Single	22
Marital status	Long term relationship	17
	Married	149
	Other	10
	Total	198

5.1.6 Family Status

Table 6: Descriptive Sample Data - Family Status

	Category	Participants
	Kids	149
Family status	No kids	49
_	Other	1
	Total	199



5.1.7 Job Level

Table 7: Descriptive Sample	Data - Job Level
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	Category	Participants
	Execution	58
	Optimisation	78
	Expertise	31
Job level	Specialisation	10
	Vice President	10
	Senior Vice President	3
	Other	0
	Total	199

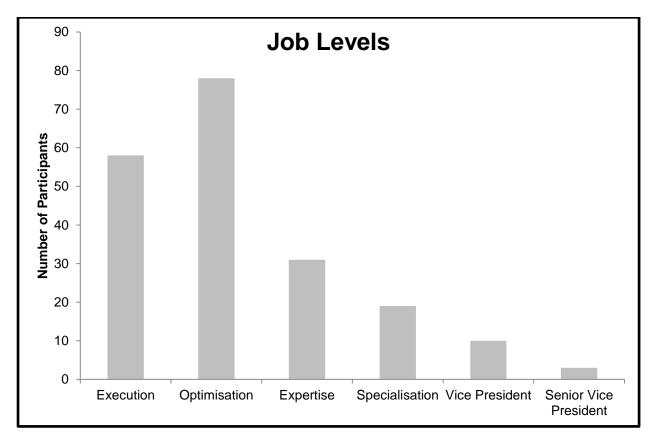


Figure 5: Descriptive Sample Data - Job Levels



5.1.8 Number of years with the organisation Table 8: Descriptive Sample Data - Number of years with the organisation

_	Categories	Participants
	Less than 2 years	11
Number of years with the	3 to 5 years	24
organisation	6 to 9 years	35
	More than 10 years	129
	Total	199

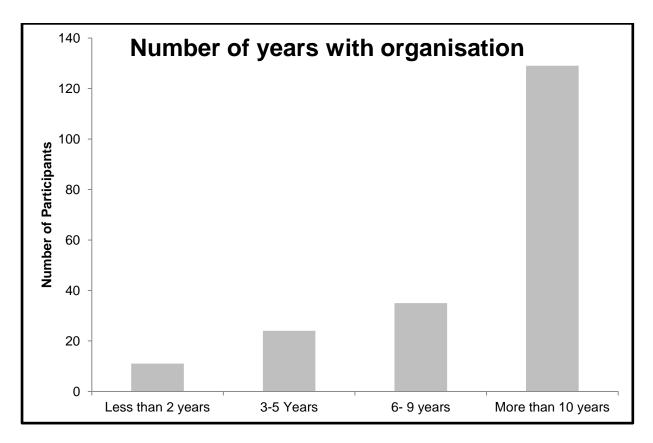


Figure 6: Descriptive Sample Data - Number of years with the organisation



5.1.9 Length of time you intend to continue working for this organisation Table 9: Descriptive Sample Data - Length of time you intend to continue working for this organisation

	Category	Participants
	At most 1 year	24
Length of time you intend	At most 2 years	30
to continue working for this organisation	At most 5 years	36
	More than 5 years	85
	Other	23
-	Total	198

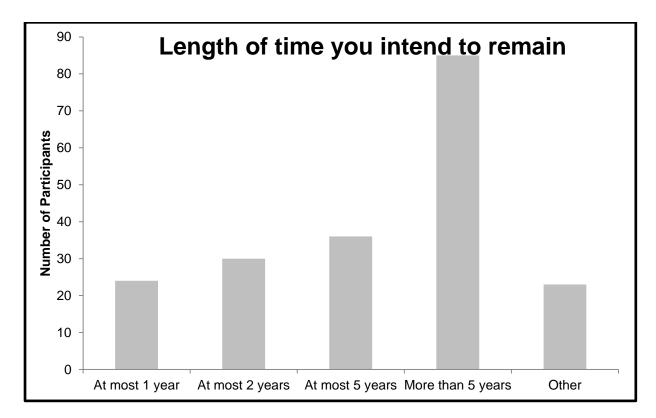


Figure 7: Descriptive Sample Data - Length of time you intend to remain with this organisation



5.1.10 Last merit rating at the organisation

Table 10: Descriptive Sample Data - Last Merit rating at the organisation

	Category	Participants
	X (non-performer)	2
	N (new performer)	4
Last merit rating at the	D (developing performer)	6
organisation	F (full performer)	135
	E (excellent performer)	49
	Other	3
	Total	199

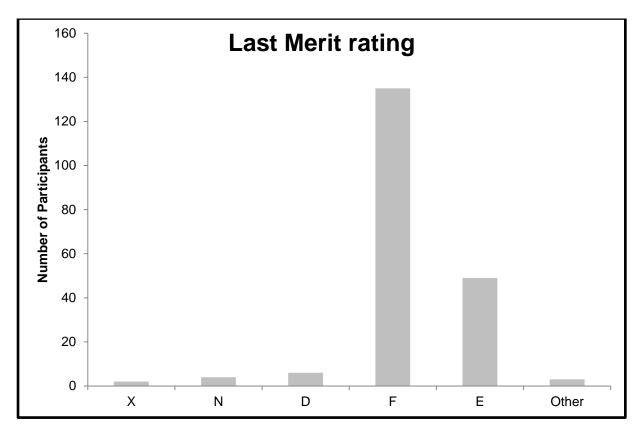


Figure 8: Descriptive Sample Data - Last Merit rating



5.2 Results on reliability and validity of the data

The following questions were asked in the questionnaire on a five point Likert scale.

Total Reward	Question: How important are the following for your retention?
Compensation	Base salary
	Market-related salary
	Short-term incentive
	Long-term incentive
	Company contribution to pension fund
Benefits	Medical aid
	Insurance
	Car allowance
	Cellphone allowance
	Personal safety and security in the work place
	On-site canteen
	On-site gym
	On-site crèche
	On-site dry cleaning
	On-site car wash
	On-site medical center
Work-life balance	Telecommuting
	Flexible hours
	Maternity leave
	Study leave
	Comfortable work environment
Performance	Leadership style of the organisation
management and	Formal recognition (e.g. payment)
Recognition	Informal recognition (e.g. thank you note)
	Performance review
	Performance support
Development and	Career or personal development plan
Career Opportunities	Training opportunities
	Mentorship and coaching
	Funding for tertiary studies

Table 11: Questions asked in the online survey

Since a 5 point Likert scale was used to measure the respondents level of importance for each of the areas in this study a Cronbach's Alpha analysis was used to measure the internal consistency of the data and if the scale was reliable. The Cronbach's Alpha measures the items in each of the categories that are ultimately measuring the same underlying dimension (Chiba, 2017). A Cronbach alpha and Factor analysis was done on each of the reward categories and on the financial rewards and non-financial rewards.



Table 12: Cronbach Alpha analysis

Category	Cronbach Alpha
Compensation	Good – Cronbach Alpha 0.784 > 0.65
Benefits	Good – Cronbach Alpha 0.810 > 0.65
Work-Life Balance	Good – Cronbach Alpha 0.686 > 0.65
Performance Management and Recognition	Bad – 0.583 construct was discarded
Development and Career opportunities	Good – Cronbach Alpha 0.789 > 0.65
Financial Rewards (Compensation and Benefits)	Good – Cronbach Alpha 0.803 > 0.65
Non-Financial Rewards (Work-Life Balance,	Good – Cronbach Alpha 0.835 > 0.65
Performance Management and Recognition and	
Development and Career opportunities)	

5.3 Data transformations

The Cronbach Alpha analysis was done in conjunction with a factor analysis. The Cronbach Alpha results can be viewed in Table 12. The factor analysis is a variable reduction technique which allows the reduction of the number of variables by creating a smaller set of variables that accounts for the majority of the variance in the original variables (Chiba, 2017).

For the Benefit reward category the nine variables could be split into two variables using factor analysis. Cellphone allowance, medical aid and car allowance can be grouped as one variable MedicalCarAllow. AdditionalBenefits was the second variable comprising the following variables Personal Safety, Canteen, Gym, Medical Centre, Car wash and Crèche.

Variables	Components
MedCarAllow	Medical Allowance, Car Allowance and Cellphone
	Allowance
AddBenefits	Personal Safety, On-site canteen, On-site gym,
	On-site medical centre, On-site car wash and On-
	site crèche
Complncentives	Compensation, Market related salary, Short Term
	incentive and Long Term incentive
AllBenefits	Pension Fund, Medical Allowance, Car
	Allowance, Cellphone Allowance, Personal
	Safety, On-site canteen, On-site gym, On-site
	medical centre, On-site car wash and On-site
	crèche
PerformanceDevelopment	Performance support, Personal Development
	Plan, Succession Planning, training and
	mentorship
Flexibility	Flexible hours, Telecommuting and Comfortable
	work environment
TertiaryBenefits	Study Leave, Formal recognition and Tertiary
	funding
LeadershipRecog	Leadership style and Informal recognition

Table 13: Definition of each variable grouping



Factor analysis was also used to reduce the number of variables in Financial Rewards and Non-Financial Rewards. Financial rewards were comprised of all of the variables in the reward categories compensation and benefit. Non-Financial Rewards was comprised of all the variables within Work-Life Balance, Performance Management and Recognition and Development and Career opportunities.

For the Financial rewards two variables where formed Complecentives and AllBenefits. Complecentives comprised the following variables: Compensation, Market related salary and Long-term and short-term incentives and AllBenefits was comprised of the following variables: Pension fund, medcarAllow and AdditionalBenefits.

For the Non-Financial rewards category four variables where formed from fourteen. PerformanceDevelopment was comprised of PerformanceSupport, PDP, SucessionPlan, Training and Mentorship. Flexibility was comprised of FlexibleHours, Telecommute and ComfortableWorkEn. TertiaryBenefits was made up StudyLeave, FormalRecog and TertiaryFunding, LeadershipRecog was made up of LeadershipStyle and InformalRecog. These variables are summarised in the table below.

Category	Factor Analysis
Compensation	Could not be split
Benefits	Split into 2 Factors (MedCarAllow and AddBenefits)
Work-Life Balance	Could not be split
Performance Management and Recognition	Could not be split
Development and Career opportunities	Could not be split
Financial Rewards (Compensation and Benefits)	Split into 2 factors from 7 variables (CompIncentives and AllBenefits)
Non-Financial Rewards (Work-Life Balance,	Split into 4 factors from 14 variables
Performance Management and Recognition and	(PerformanceDevelopment, Flexibility,
Development and Career opportunities)	TertiaryBenefits and LeadershipRecog)

Table 14: Factor Analysis



5.4 Statistical results per hypothesis

Hypothesis 1: Knowledge workers rank rewards differently based on their age

An ANOVA test for differences was done to determine if there was a significant difference in knowledge workers preferences for rewards based on their age. A one-way ANOVA analysis was done where the independent variable was the knowledge workers age and the dependent variable was all the Financial (Complecentives) and Non-Financial Rewards (AllBenefits, Flexibility, LeadershipRecog, TertiaryBenefits and PerformanceDevelopment).

Descriptive:

Range	No.	CompIncen tives	AllBenefits	Flexibility	Leadership Recog	TertiaryBen efits	Performanc eDevelopm ent
>29	10	3.7 ± 0.949	3.60 ± 1.075	4.70±0.483	4.30±0.949	4.40±0.699	4.60±0.516
30 to 35	44	4.68±0.639	4.20 ± 0.765	4.80±0.408	4.52±0.662	4.45±0.791	4.57±0.587
36 to 39	32	4.66±0.545	4.66 ± 0.545	4.75±0.440	4.63±0.609	4.66±0.602	4.75±0.508
40 to 45	46	4.76±0.431	4.39 ± 0.802	4.76±0.480	4.54±0.585	4.48±0.691	4.48±0.623
46 to 49	33	4.48±0.619	4.09 ± 1.011	4.52±0.712	4.55±0.617	4.06±0.899	4.36±0.822
50 to 55	19	4.42±0.692	4.26 ± 0.562	4.58±0.607	4.53±0.612	3.95±0.911	4.26±0.653
56 to 59	13	4.46±0.660	4.38 ± 0.506	4.62±0.506	4.77±0.439	4.31±0.855	4.62±0.653
<60	2	4.50±0.707	3.50 ± 0.707	5.00±0	5.00±0	3.50±2.121	4.00±0
Total	199	4.57±0.638	4.28 ± 0.805	4.70±0.522	4.56±0.624	4.36±0.809	4.51±0.635

Table 15: Hypotheses 1 – Descriptive Mean and Standard deviation



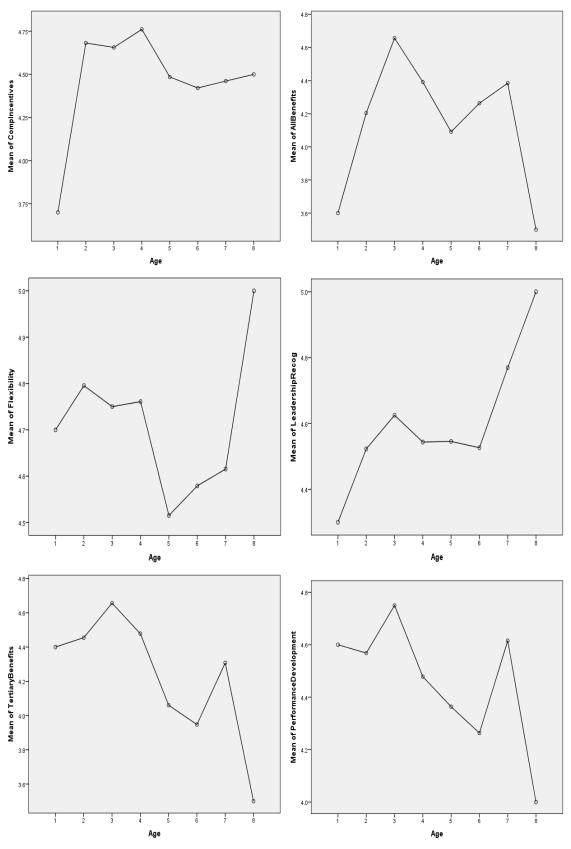


Figure 9: ANOVA - Hypothesis 1



Test of Homogeneity of Variances							
	Levene						
	Statistic	df1	df2	Sig.			
CompIncentives	2.975	7	191	.006			
AllBenefits	3.295	7	191	.002			
Flexibility	5.026	7	191	.000			
LeadershipRecog	3.582	7	191	.001			
TertiaryBenefits	2.352	7	191	.025			
PerformanceDevelopment	3.687	7	191	.001			

Table 16: Hypothesis 1 - Test of Homogeneity of Variances

The Sig presents the significance value or the P-value of the test similarly to Levene's test for homogeneity. Since this P-value is less than 0.05 and therefore significant, this sample does not have equal variances therefore it has violated the assumption of homogeneity. The post-hoc analysis that will be evaluated will be the Games-Howell. A post-hoc analysis is required as the ANOVA showed that there is a significant difference between groups but not which groups. The post-hoc analysis shows which groups have a significant difference.



Table 1	17: Hypothesis 1 - And	ova
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		ANOVA				
		Sum of		Mean		
		Squares	df	Square	F	Sig.
CompIncentives	Between	10.855	7	1.551	4.241	.000
	Groups					
	Within Groups	69.839	191	.366		
	Total	80.693	198			
AllBenefits	Between	12.518	7	1.788	2.952	.006
	Groups					
	Within Groups	115.723	191	.606		
	Total	128.241	198			
Flexibility	Between	2.330	7	.333	1.233	.287
	Groups					
	Within Groups	51.580	191	.270		
	Total	53.910	198			
LeadershipRecog	Between	1.869	7	.267	.678	.691
	Groups					
	Within Groups	75.217	191	.394		
	Total	77.085	198			
TertiaryBenefits	Between	11.567	7	1.652	2.672	.012
	Groups					
	Within Groups	118.101	191	.618		
	Total	129.668	198			
PerformanceDevelopment	Between	4.647	7	.664	1.689	.114
	Groups					
	Within Groups	75.071	191	.393		
	Total	79.719	198			

At the 95% confidence level which we are testing at if the P-value in the Anova table is less than 0.05 there is a significant difference in preference for the reward between the age groups. If this value is higher than 0.05 then there is no significant difference in reward preference between the groups.

From our analysis it can be seen that there is a significant difference between the age groups for the following reward preferences Complecentives, AllBenefits and TertiaryBenefits. There is no significant difference in reward preferences between the age groups for Flexibility, LeadershipRecog and PerformanceDevelopment.



When evaluating the post-hoc Games Howell output if p-value is less than 0.05 you have a statistically significant result. If p-value is greater than 0.05 you do not have a statistically significant result.

CompIncentives	All groups p-value > 0.05 – not significant
AllBenefits	All groups p-value > 0.05 – not significant
Flexibility	2 (30 to 35) and 8 (Above 60)
	4 (40 to 45) and 8 (Above 60)
	5 (46 to 49) and 8 (Above 60)
LeadershipRecog	2 (30 to 35) and 8 (Above 60)
	3 (36 to 39) and 8 (Above 60)
	4 (40 to 45) and 8 (Above 60)
	5 (46 to 49) and 8 (Above 60)
TertiaryBenefits	All groups p-value > 0.05 – not significant
PerformanceDevelopment	2 (30 to 35) and 8 (Above 60)
	3 (36 to 39) and 8 (Above 60)
	4 (40 to 45) and 8 (Above 60)
	7 (56 to 59) and 8 (Above 60)

Table 18: Hypothesis 1 - Post Hoc analysis

The results for hypothesis 1 will be further discussed in the Chapter 6: Discussion.

Hypothesis 2: High preforming knowledge workers (performance rating excellent performer E) value rewards differently than lower performing knowledge workers (full performer F)

An independent test of differences was used to evaluate if there is a difference in rewards preference between high performing knowledge workers versus lower performing knowledge workers. The independent variable performance of the knowledge work: Higher performing (E) or Low Performing (F). The dependent variable is their rewards preference which includes financial and non-financial rewards. Financial rewards are made up of the following variables Complncentives and non-financial rewards are made up of AllBenefits, Flexibility, LeadershipRecog, TertiaryBenefits and PerformanceDevelopment.

Descriptive:

	N	CompInce ntives	AllBenefits	Flexibility	Leadership Recog	TertiaryBen efits	Performance Develoment
F	135	4.56±0.677	4.33±0.773	4.71±0.516	4.52±0.656	4.41±0.786	4.52±0.621
Е	49	4.63±0.566	4.22±0.823	4.69±0.548	4.63±0.566	4.18±0.858	4.53±0.680

Table 19: Hypotheses 2 - Descriptive

Levene's test for homogeneity of variances must be checked. If the p-value is greater than 0.05 the sample has met the assumption of homogeneity of variances. In our sample all of the variables have a p-value of greater than 0.05 therefore the assumption of homogeneity of variances is valid.



From the t-test for Equality of means referring to the equal variances row per variable if the 2-tailed sig or p-value is less than 0.05 there is a significant difference between the rewards preference between the higher performing knowledge workers and the lower performing knowledge workers. All of the p-values are greater than 0.05 therefore there is no statistical significant difference.

The results for hypothesis 2 will be further discussed in the Chapter 6: Discussion.

Hypothesis 3: Knowledge workers working at the same organisation for a long period of time rate their preference to remain with the organisation differently compared to knowledge workers with shorter service

An ANOVA test for differences was done to determine if there was a significant difference in knowledge workers preferences for remaining with the organisation based on the their number of years served at the organisation. A one-way ANOVA analysis was done where the independent variable was the number of years with the organisation and the dependent variable was the participants intended years to stay with the organisation.

Descriptive:

Number of years with company	Participants	Mean ± Std Deviation
Less than 2 years	11	3.55 ± 0.934
3 to 5 years	24	2.92 ± 1.248
6 to 9 years	35	3.40 ± 1.288
More than 10 years	129	3.26 ± 1.214
Total	199	3.26 ± 1.218

Table 20: Hypothesis 2 - Descriptive



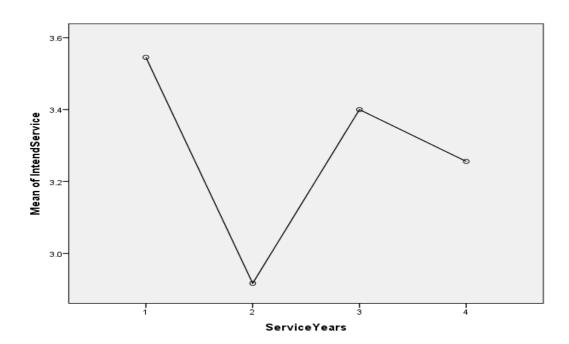


Figure 10: Hypothesis 2 - Anova

Test of Homogeneity of Variances						
IntendService						
Levene Statistic	df1	df2	Sig.			
.742	3	195	.528			

The Sig presents the significance value or the P-value of the test similarly to Levene's test for homogeneity. Since this P-value is greater than 0.05 and therefore not significant this sample does has equal variances therefore it has validated the assumption of homogeneity. The post-hoc analysis that will be evaluated will be the Tukey HSD.

Table 22: Hypothesis 2 - Anova

ANOVA						
IntendService						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	4.411	3	1.470	.990	.398	
Within Groups	289.519	195	1.485			
Total	293.930	198				

At the 95% confidence level which we are testing at if the P-value in the Anova table is less than 0.05 there is a significant difference in preference for intending to remain with the



organisation depending on the number of years of service to the organisation. If this value is higher than 0.05 then there is no significant difference in terms of staying with the organisation based on the number of years of service between the groups. From the table above the p-value is greater than 0.05 so there is no significant difference between the numbers of years a knowledge worker has served at the organisation versus their intention to remain with the organisation.

From the post-hoc analysis Tukey HSD if p-value is less than 0.05 you have a statistically significant result. If p-value is greater than 0.05 you do not have a statistically significant result. There was no significant difference between any of the groups in the post-hoc analysis.

The results for hypothesis 3 will be further discussed in the Chapter 6: Discussion.

Hypothesis 4: Younger age groups of knowledge workers differ in preference to leave the organisation compared to older knowledge workers

An ANOVA test for differences was done to determine if there was a significant difference of knowledge workers preferences remaining with the organisation based on the participant's age. A one-way ANOVA analysis was done where the independent variable was the knowledge workers age and the dependent variable was the participants intended years to stay with the organisation.

Descriptive:

Range	No.	IntendService		
>29	10	3.50 ± 1.269		
30 to 35	44	3.32 ± 1.235		
36 to 39	32	2.97 ± 1.379		
40 to 45	46	3.33 ± 1.317		
46 to 49	33	3.15 ± 1.202		
50 to 55	19	3.58 ± 0.838		
56 to 59	13	3.00 ± 0.816		
<60	2	4.00 ± 1.414		
Total	199	3.26 ± 1.218		

Table 23: Hypothesis 4 - Descriptive



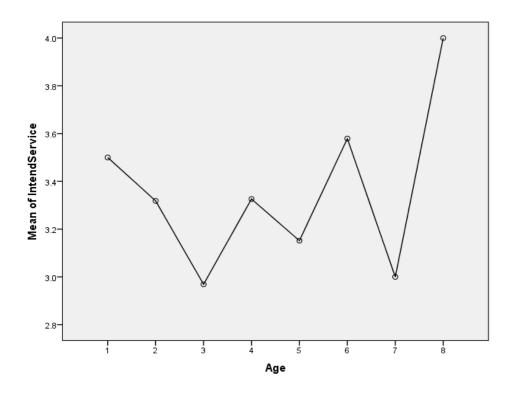


Figure 11: Hypothesis 4 - Anova

Table 24: Hypotheses 4 - Test	of Homogeneity of Variances
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Test of Homogeneity of Variances						
IntendService						
Levene Statistic	df1	df2	Sig.			
2.219	7	191	.034			

The Sig presents the significance value or the P-value of the test similarly to Levene's test for homogeneity. Since this P-value is less than 0.05 and therefore significant this sample does not have equal variances therefore it has violated the assumption of homogeneity. The post-hoc analysis that will be evaluated will be the Games-Howell.

Table 25: Hypothesis 4 - Anova

ANOVA						
IntendService						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	7.933	7	1.133	.757	.624	
Within Groups	285.997	191	1.497			
Total	293.930	198				



At the 95% confidence level which we are testing at if the p-value in the Anova table is less than 0.05 there is a significant difference in preference for the reward between the age groups. If this value is higher than 0.05 then there is no significant difference in intentions to stay preference between the groups.

From our analysis it can be seen that there is no significant difference in intention to stay preferences between the age groups. When evaluating the post-hoc Games Howell output if p-value is less than 0.05 you have a statistically significant result. If p-value is greater than 0.05 you do not have a statistically significant result. From the analysis there were no statistically significant differences in retention preference based on age between the different age groups.

The results for hypothesis 4 will be further discussed in the Chapter 6: Discussion.

Hypotheses 5: The total rewards preferences will differ between male and female knowledge workers

An independent test of differences was used to evaluate if there is a difference in rewards preference between male and female knowledge workers. The independent variable is the knowledge workers gender, male or female. The dependent variable is their rewards preference which includes financial and non-financial rewards. Financial rewards are made up of the following variable Complecentives and non-financial rewards are made up of AllBenefits, Flexibility, LeadershipRecog, TertiaryBenefits and PerformanceDevelopment.

Descriptive:

	N	CompIncen tives	AllBenefits	Flexibility	Leadership Recog	TertiaryBen efits	Performanc eDevelomen t
Female	84	4.61±0.602	4.42±0.795	4.86±0.385	4.62±0.619	4.44±0.750	4.64±0.573
Male	115	4.55±0.665	4.18±0.801	4.58±0.577	4.51±0.626	4.30±0.848	4.42±0.662

Table 26: Hypothesis 5 - Descriptive

Levene's test for homogeneity of variances must be checked. If the p-value is greater than 0.05 the sample has met the assumption of homogeneity of variances. In our sample Complecentives, AllBenefits, LeadershipRecog and TertiaryBenefits have a p-value of greater than 0.05 therefore the assumption of homogeneity of variances is valid. Flexibility and PerformanceDevelopment had p-values lower than 0.05 therefore they do not meet the assumption of homogeneity of variances.



From the t-test for Equality of means referring to the equal variances row for Complicentives, AllBenefits, LeadershipRecog and TertiaryBenefits and to the equal variances not assumed row for Flexibility and PerformanceDevelopment, if the 2-tailed sig or p-value is less than 0.05 there is a significant difference between the rewards preference between male and female knowledge workers. From the results for Complicentive, LeadershipRecog and TertiaryBenefits the p-values are greater than 0.05 therefore there is no statistical significant difference. The results indicate that there is a significant statistical difference between males and female preferences for these rewards preferences AllBenefits, Flexibility and PerformanceDevelopment.

The results for hypothesis 5 will be further discussed in the Chapter 6: Discussion.

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 has provided the results of the statistical analysis that was done on the online survey responses. The validity and reliability of the data has also been demonstrated in Chapter 5. Chapter 6 will further discuss the results from the statistical analysis that has been presented in Chapter 5.



CHAPTER 6: DISCUSSION OF RESULTS

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 has provided the results of the statistical analysis that was done on the online survey responses. The validity and reliability of the data has also been demonstrated in Chapter 5. Chapter 6 will further discuss the results from the statistical analysis that has been presented in Chapter 5 and reiterate the literature findings.

6.1 Recap of Literature review

Knowledge workers can be defined as employees who have specialty knowledge within their area of expertise and by applying this knowledge they can benefit the organisation in making informed decisions on complex matters (Jayasingam et al., 2016). Theory on the knowledge based view and information economics indicated that knowledge workers are actually tangible assets which are strategically important resources that facilitate the establishment of a competitive advantage (Jayasingam et al., 2016).

Knowledge worker of the 21st century display different characteristics than before. These workers display high levels of mobility, realise that their skills are highly demanded and do not aim to have a job for a life time. This change in behaviour greatly impacts the way in which retention needs to be managed. The study done by Khoele and Daya (2014) describes this change as "moving from tending a dam to managing a river: the aim is not to prevent water from flowing, but to control its direction and speed" (page 2).

Knowledge workers continually search for development and advancement opportunities, lateral or upward, within their organisation. The research done by Khoele and Daya (2014) has clearly shown that knowledge workers will leave if they cannot advance within their organisations. Organisations that focus on fostering growth and development will have lower turnover rates. Information from exit interviews conducted show that respondents who had left due to their relationship with their manager sited lack of communication, no direction or feedback and lack of agreement on their development (Khoele & Daya, 2014).

There is a forecasted shortage of skills in the next 15 years particularly in the age bracket of 35 to 45 years. It is anticipated that the growth for demand in this bracket will increase by 25% whilst the supply of labour will decrease by 15% which results in a 40% shortfall of skills



if no action is taken (Dawn & Biswas, 2013). Employers are forced to compete to gain the talent and skills that are required to accomplish the organisations strategic objectives. An excess supply of labour is no longer available to camouflage ineffective human resource strategies (Dawn & Biswas, 2013). The ability to attract, retain and motivate this talent will become harder due to the increased turnover costs which are comprised of loss of corporate memory, productivity and intellectual and social capital. There are direct and indirect costs associated with losing talented employees (Schlechter, Thompson, et al., 2014). The direct costs include the cost of replacing the employee, downtime, recruiting, interviewing, onboarding and the training and development of the new employee. Costs for losing an employee can be up to 2.5 times the annual salary paid for the job. The indirect financial costs include work disruptions, loss of knowledge, productivity, customers, mentors and even increased employee turnover (Schlechter, et al., 2014). Retaining key employees is critical to the long term success of an organisation (Balakrishnan & Vijayalakshmi, 2014).

In addition to the losses that accompany the turnover of knowledgeable employees, South Africa is suffering from a major skills shortage especially in technical fields such as engineering (Rasool & Botha, 2011). South Africa is losing a large number of its knowledge workers which will eventually disable the economy from competing globally (Coetzee et al., 2014; Rasool & Botha, 2011). The turnover of knowledge workers especially in senior and management positions has a detrimental effect on the productivity and profitability of an organisation. "High staff turnover is a cause for alarm, not only because of the costs associated with recruitment, selection and training, but also due to the increasing scarcity of experienced talent" (Khoele & Daya, 2014, page 1). Knowledge workers not only results in monetary and knowledge loss but also the unavailability of experienced talent to replace them. South Africa is experiencing a skills crisis in general and retaining knowledge workers is difficult due to their unique attributes. This "scarcity of skills stimulates the open competition for talent and drives turnover higher" (Khoele & Daya, 2014, page 5)

Globalisation has enabled knowledge workers greater flexibility and higher mobility in the recent years and in a survey done in large South African organisations it was found that global mobility resulted in 21% of the total turnover (Khoele & Daya, 2014). "If SA is to prosper, high-skilled individuals should be recruited and retained – not pushed to find opportunities elsewhere" and "In the knowledge economy, knowledge elites are the bedrock of success. If we are to learn from history, cultivating them should be our number one priority" (Fourie, 2016, page 4).



A reward is considered to be a significant tool to attract, stimulate motivation and ensure the retention of employees (Bussin et al., 2012). The "total rewards programme" includes rewards of monetary value and rewards that are non-monetary. Other benefits are included in non-monetary rewards. Employees may focus on rewards that are monetary based but their behaviour is influenced by the non-monetary rewards.

From the study done on the retention of artisans within South Africa (Schlechter, Faught, et al., 2014) the following was noted:

- Employees build a deeper relationship with their employer with increased motivation, engagement and commitment when there are both financial and non-financial rewards
- Increased flexibility also binds employees more strongly to the organisation as the organisation is able to cater for the employees individual needs
- Non-monetary rewards positively entice a psychological contract and leads to attracting and retaining talent

A Financial reward is made up of compensation and benefits. A study was done to test the effect of financial and non-financial remuneration on lecturer's performance and professionalism in Asia (Idris et al., 2017). The results of the study showed that both financial and non-financial remuneration had a significant impact on the lecturers professionalism. The study further showed that financial compensation had a positive effect on the lecturers performance but non-financial compensation did not (Idris et al., 2017). So the lecturers performance was only influenced by financial compensation but their behaviour was affected by both financial and non-financial compensation.

Non-financial rewards is made up of work-life effectiveness, recognition, performance management. A study done evaluating the impact of family and work-life balance on the performance of Spanish listed companies showed that introducing work-life balance practices into an organisation benefits the organisation in terms of talent retention, higher employee engagement, higher productivity, lower costs and overall better business results (Benito-Osorio et al., 2014).

Recognition can be described as the acknowledgement of employee actions, efforts, behaviour and performance both formal and informal. It is a part of the non-financial compensation that can be provided to employees and includes recognising achievements, promotion opportunities and providing development (Idris et al., 2017). A survey done asking



employees to value various rewards resulted in non-financial rewards being placed higher than financial rewards (Idris et al., 2017).

Performance management is the alignment of organisational, team and individual goals to meet the business objectives. It is the establishment of expectations, skills, assessment and feedback and improvement. Performance feedback has been shown to significantly improve performance (Idris et al., 2017).

It was also found that demographic variables such as gender, race and age had no significant impact on the outcome of this result. From this research it shows that job attractiveness for knowledge workers is directly linked to Financial rewards, specifically remuneration or compensation (Schlechter, Hung, et al., 2014). The total rewards model was used in this evaluation to determine the most prefered reward for knowledge workers. The ranking from this study was in order of preference: Remuneration and Benefits, Work-life balance and Learning and Career advancement(Schlechter, Hung, et al., 2014).

6.2 Hypothesis 1

Knowledge workers rank rewards differently based on their age

There were also demographic variables that affect employees rewards preferences.

South Africa is faced with a greater problem of employee turnover due to the low supply of knowledge workers due to increased emigration and the lower standards of education. According to research that was done on the impact of demographic variables on voluntary labour turnover in South Africa it was found that various demographic variables such as age, race and gender do influence individual turnover decisions (Wöcke & Heymann, 2012). It was further found that level of education influences mobility greater than race. The age of employees has been shown via various research studies to have an impact on employee commitment, job embeddedness, employee's psychological contract and turnover decision. This could be a result of employees prioritising different aspects of their lives job vs. personal as they age. The study done also indicated that younger employees are more eager to leave (Wöcke & Heymann, 2012).

The research done by Khoele and Daya (2014) has shown that there was a distinct difference in the respondents thinking and perceptions on employee turnover below and above 40 years of age. The group below 40 years were not afraid to change jobs to ensure they could advance in their career development and growth. Whilst the group over 40's main concern was to have job security and a pension fund. The average age of the leavers in the



study were 34.5 years and the stayers 45.2 years. Age has been shown is some research to have an impact on retention and turnover with younger employees tending to leave whilst older employees stay (Khoele & Daya, 2014).

From the research done on total rewards that retain it was found that older Generations X(37 to 52 years) valued financial rewards such as base salary, medical aid and long term incentives (Pregnolato et al., 2017). Career advancement and development was rated higher for Generation X than work-life balance (Pregnolato et al., 2017). The younger Generation Y (17 to 36 years) valued non-financial factors such as work-life balance as their highest priority. Generation Y was retained by career advancement opportunities, interesting work and work-life balance (Pregnolato et al., 2017).

This study:

A one-way ANOVA analysis was done to test for differences for reward preferences based on the different age groups. An ANOVA analysis was done instead of a t-test as there were more than 2 groups to test between. From analysis of the descriptive in Table 14 and Figure 10 it is seen that the there is a variation between the means and standard deviations between all of the age groups for each of the reward variables. This analysis will determine if this difference is statistically significant or not.

The test for homogeneity of variances is shown in Table 15. The Sig presents the significance value or the P-value of the test similarly to Levene's test for homogeneity. Since this P-value is less than 0.05 and therefore significant this sample does not have equal variances therefore it has violated the assumption of homogeneity. The post-hoc analysis that will be evaluated will be the Games-Howell.

At the 95% confidence level which we are testing at if the P-value in the Anova Table 16 is less than 0.05 there is a significant difference in preference for the reward between the age groups. If this value is higher than 0.05 then there is no significant difference in reward preference between the groups. From our analysis it can be seen that there is a significant difference between the age groups for the following reward preferences Complecentives, AllBenefits and TertiaryBenefits. There is no significant difference in reward preferences between the age groups for Flexibility, LeadershipRecog and PerformanceDevelopment.

When evaluating the post-hoc Games Howell output if p-value is less than 0.05 you have a statistically significant result. If p-value is greater than 0.05 you do not have a statistically significant result. Table 17 shows that the reward variables Complementives, AllBenefits and TertiaryBenefits do not have a significant difference based on the knowledge workers age.



Flexibility, LeadershipRecog and PerformanceDevelopment however showed a statistically significant difference between age groups. From Table 17 it can be seen that all of the age groups differed with the above 60 age group for these reward variables. Considering there were only two participants in the above 60 age group, these differences can be considered invalid.

Therefore from the analysis done there is no significant difference in rewards preferences based on the knowledge workers age. The null hypothesis can be accepted. This is in line with Schlechter, Hung, et al. (2014) where it was also found that demographic variables such as gender, race and age had no significant impact on the outcome of this result. This result is in contrast to the work done by Pregnolato (2017), Wöcke & Heymann (2012) and Khoele & Daya (2014) where there was a significant deviation in rewards preferances noted at different ages.

6.3 Hypothesis 2

High preforming knowledge workers (performance rating excellent performer E) value rewards differently than lower performing knowledge workers (full performer F)

There was rewards preference differences noted for low and high performing employees:

The reasons why high performers and low performers leave an organisation can be differentiated as there are internal and external factors that contribute to their decisions (Trevor, 2001). High performers leave due to internal factors such as perceived pay and opportunity for advancement whilst low performers leave more due to their relationship with their supervisor. External factors such as negative experiences lead low performers to leave where as high performers are most likely to leave due to alternative offers and new job advancement (Trevor, 2001).

High performers generally cited advancement opportunities and organisational prestige and low performers generally cited extrinsic rewards as their reason for staying with their current organisation (Hausknecht et al., 2009).

Research done on understanding the impact of Financial rewards on talent attraction for knowledge workers showed that remuneration had the highest impact on the attractiveness of a job compared to increased benefits and variable pay (Schlechter, Hung, et al., 2014).



This study:

An independent test of differences was used to evaluate if there is a difference in rewards preference between high performing knowledge workers versus lower performing knowledge workers.

From the descriptive analysis in Table 18 the number of respondents for full performing candidates was higher at 135 participants compared to the excellent performing candidates at 49 participants. Each of the mean and standard deviations differed per performance and reward category. This independent t-test will assist evaluating if these differences are statistically significant.

Levene's test for homogeneity of variances was checked to have a p-value of greater than 0.05 the sample. In our sample all of the variables have a p-value of greater than 0.05 therefore the assumption of homogeneity of variances is valid. From the t-test for Equality of means referring to the equal variances row all of the p-values were greater than 0.05 therefore there is no statistical significant difference at a 95% confidence level.

Therefore from the analysis there is no significant difference between rewards preferences of high performing knowledge workers versus lower performing knowledge workers. The null hypothesis can be accepted. Performance therefore had no significant impact on the knowledge workers rewards preferences.

6.4 Hypothesis 3

Knowledge workers working at the same organisation for a long period of time rate their preference to remain with the organisation differently compared to knowledge workers with shorter service

The literature review pointed to an interesting result that the longer an employee remains with an organisation, the less likely they are to leave the organisation. This could be attributed to many factors including their commitment to the organisation, their family commitments, the lack of jobs available in the market and various other factors. For this study we can measure the number of years the employee has worked for the organisation versus how many years they intend to continue working for the organisation. The exact reason for why they have chosen to stay would not be known.

An ANOVA test for differences was done to determine if there was a significant difference in knowledge workers preferences for remaining with the organisation based on the their



number of years served at the organisation. An ANOVA analysis was done instead of a t-test as there were more than 2 groups to test between. From analysis of the descriptive in Table 19 and Figure 11 it is seen that the there is a variation between the means and standard deviations between the number of years with the company and intended number of years to remain with the organisation. This analysis will determine if this difference is statistically significant or not.

The Sig in Table 20 presents the significance value or the P-value of the test similarly to Levene's test for homogeneity was greater than 0.05 therefore this sample does has equal variances and it has validated the assumption of homogeneity. The post-hoc analysis that was evaluated was Tukey HSD in Table 21. From the table 21 the p-value is greater than 0.05 so there is no significant difference between the numbers of years a knowledge worker has served at the organisation versus their intention to remain with the organisation. There was no significant difference between any of the groups in the post-hoc analysis.

Therefore there is no significant difference between the number of years a knowledge worker works at an organisation and the number of years they intend to remain at the organisation. The null hypothesis can be accepted. This is in contradiction to the study done by Khoele & Daya (2014) which showed that there is a correlation between the number of years an employee is with an organisation versus their retention. The longer an employee is with an organisation the more likely they are to remain (Khoele & Daya, 2014).

6.5 Hypothesis 4

Younger age groups of knowledge workers differ in preference to leave the organisation compared to older knowledge workers

The literature review focused on the impact of the participant's age, family status and gender on their total rewards preferences. From the literature review some research found that the turnover rate is higher with younger employees within an organisation compared to older employees. Some of the research alluded to the fact that older employees prefer stability especially if they are closer to retirement so they would be less inclined to leave the organisation. The literature also showed that younger employees are more focused on their career development and are willing to move between organisations to get the development they seek.

An ANOVA test for differences was done to determine if there was a significant difference of knowledge workers preferences remaining with the organisation based on the participant's



age. An ANOVA analysis was done instead of a t-test as there were more than 2 groups to test between. From analysis of the descriptive in Table 22 and Figure 12 it is seen that the there is a variation between the means and standard deviations between the age groups and intended number of years to remain with the organisation. This analysis will determine if this difference is statistically significant or not.

The Sig in Table 23 presents the significance value or the P-value of the test similarly to Levene's test for homogeneity. Since this P-value is less than 0.05 and therefore significant this sample does not have equal variances therefore it has violated the assumption of homogeneity and the post-hoc analysis evaluated was Games-Howell.

At the 95% confidence level which we are testing at if the p-value in the Anova Table 24 is less than 0.05 there is a significant difference in preference in intention to stay between the age groups. If this value is higher than 0.05 then there is no significant difference in intentions to stay preference between the groups. From our analysis it can be seen that there is no significant difference in intention to stay preferences between the age groups. When evaluating the post-hoc Games Howell output if p-value is less than 0.05 you have a statistically significant result. If p-value is greater than 0.05 you do not have a statistically significant result. From the analysis there were no statistically significant differences in retention preference based on age between the different age groups.

Therefore there is no difference in intention to stay with the organisation dependent on the knowledge workers age. The null hypothesis can be accepted. This is contradictory to many research studies which have shown the age of employees has an impact on employee commitment, job embeddedness, employee's psychological contract and turnover decision. The study done also indicated that younger employees are more eager to leave (Wöcke & Heymann, 2012). Age has been shown is some research to have an impact on retention and turnover with younger employees tending to leave whilst older employees stay (Khoele & Daya, 2014).

6.6 Hypothesis 5

The total rewards preferences will differ between male and female knowledge workers

In the literature review many studies showed the difference between reward preferences for males and females. One of the studies showed that more educated women tended to follow the same turnover pattern as males. There could be many reasons for the difference in rewards preferences from female requiring more work-life effectiveness due to family commitments, females experiencing the "glass ceiling" in the organisation therefore choosing



more development rewards or a host of other reasons. This study will determine their preference and not necessarily why this is their preference.

With regards to gender affecting employee turnover, it was found that the turnover patterns of highly educated women resemble the turnover of men far more than that of less educated women. Various researches have indicated that men are paid a higher salary than women for similar job categories and the "glass ceiling" in promotion opportunities for women also lead to high turnover rates (Wöcke & Heymann, 2012). South Africa has the added problem of unequal access to education for disadvantaged groups which impacts the skilled workforce. The combination of skills shortages and Employment Equity has an impact on employee turnover between different designated groups within South Africa (Wöcke & Heymann, 2012). The study found that gender, age and race influence employee turnover. Employee race does not have an influence on employee mobility whereas level of education does (Wöcke & Heymann, 2012).

This study:

An independent test of differences was used to evaluate if there is a difference in rewards preference between male and female knowledge workers. The independent variable is the knowledge workers gender, male or female. The dependent variable is their rewards preference which includes financial and non-financial rewards. Financial rewards are made up of the following variable Complecentives and non-financial rewards are made up of AllBenefits, Flexibility, LeadershipRecog, TertiaryBenefits and PerformanceDevelopment.

From the descriptive analysis in Table 25 the number of respondents for males was higher at 115 participants compared to females at 84 participants. Each of the mean and standard deviations differed per reward category. This independent t-test will assist evaluating if these differences are statistically significant.

Levene's test for homogeneity of variances was checked for a p-value is greater than 0.05 for the sample to meet the assumption of homogeneity of variances. In our sample Complecentives, AllBenefits, LeadershipRecog and TertiaryBenefits have a p-value of greater than 0.05 therefore the assumption of homogeneity of variances is valid. Flexibility and PerformanceDevelopment had p-values lower than 0.05 therefore they do not meet the assumption of homogeneity of variances.

From the t-test for Equality of means referring to the equal variances row for Complecentives, AllBenefits, LeadershipRecog and TertiaryBenefits and to the equal variances not assumed row for Flexibility and PerformanceDevelopment, if the 2-tailed sig or



p-value is less than 0.05 there is a significant difference between the rewards preference between male and female knowledge workers. From the results for Complncentive, LeadershipRecog and TertiaryBenefits the p-values are greater than 0.05 therefore there is no statistical significant difference. The results indicate that there is a significant statistical difference between males and female preferences for these rewards preferences AllBenefits, Flexibility and PerformanceDevelopment.

Therefore from the analysis there is a significant difference for AllBenefits, Flexibility and PerformanceDevelopment preferences based on gender, males or females. This result is in agreement with the outcome found by Wöcke & Heymann (2012). AllBenefits is comprised of the following components:

- Pension Fund
- Medical Allowance
- Car Allowance
- Cellphone Allowance
- Personal Safety
- On-site canteen
- On-site gym
- On-site medical centre
- On-site car wash
- On-site crèche

Females rated AllBenefits significantly higher than their male counterparts.

Flexibility is comprised of the following components:

- Flexible hours
- Telecommuting
- Comfortable work environment

Females rated Flexibility significantly higher than their male counterparts.

PerformanceDevelopment is comprised of the following components:

- Performance support
- Personal Development Plan
- Succession Planning
- Training
- Mentorship



Females also rated PerformanceDevelopment significantly higher than their male counterparts.

In the literature review many studies showed the difference between reward preferences for males and females. One of the studies showed that more educated women tended to follow the same turnover pattern as males. There could be many reasons for the difference in rewards preferences from female requiring more work-life effectiveness due to family commitments, females experiencing the "glass ceiling" in the organisation therefore choosing more development rewards or a host of other reasons.

The factors that influence affective organisational commitment may also be effected based on gender as males and females have different behavioural tendencies. Women lean towards a knowledge-sharing culture as this assists with networking and communication. Women may have different reasons for remaining within an organisation and the glass ceiling effect may exacebate some of the variables in the study due to gender inequalities (Jayasingam et al., 2016). Female knowledge workers level of affective organisation commitment may be influenced due to these inequality factors so measuring responses from males and females was important for the study.

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 has provided the results of the statistical analysis that was done on the online survey responses. The validity and reliability of the data has also been demonstrated in Chapter 5. Chapter 6 further discussed the results from the statistical analysis that was been presented in Chapter 5 and reiterated the literature findings. Chapter 7 will highlight the main conclusions of this study, limitations and future areas for research.



CHAPTER 7: CONCLUSION

Chapter 1 defined the research problem and why this research is being conducted. Chapter 2 discussed the current literature available on total rewards, remuneration, retention, talent management, turnover and knowledge workers. Chapter 3 outlined the hypothesis to be tested in this research. Chapter 4 discussed how the research data was actually obtained including the details of the research design, sampling procedure, how the data was collected and analysed and how quality of the data and analysis was ensured. Chapter 5 has provided the results of the statistical analysis that was done on the online survey responses. The validity and reliability of the data has also been demonstrated in Chapter 5. Chapter 6 further discussed the results from the statistical analysis that was been presented in Chapter 5 and reiterated the literature findings. Chapter 7 will highlight the main conclusions of this study, limitations and future areas for research.

"If SA is to prosper, high-skilled individuals should be recruited and retained – not pushed to find opportunities elsewhere" and "In the knowledge economy, knowledge elites are the bedrock of success. If we are to learn from history, cultivating them should be our number one priority" (Fourie, 2016, page 4).

The aim of this research "An evaluation of the remuneration preferences to retain knowledge workers in an integrated international energy and chemical company" was to understand the remuneration preferences for retention of a group of knowledge workers within a large organisation based in South Africa. If this research was not conducted in organisations within South Africa, knowledge workers will continue leaving for preferential opportunities else where which will ultimately be detrimental for the future economic growth and development of South Africa. Understanding how to incentivise and reward employees via the total reward factor model will retain knowledge workers and increase the attractiveness of working at the organisation. Various studies of the total rewards factors have been done in many of the different fields but none particularly in a large South African International Energy and Chemicals company. This study was done to provide information for large companies such as this to ideally combine the total rewards factors to attract and retain knowledge workers.

In an ideal situation organisations should fully understand the needs of their employees in terms of remuneration preferences. Organisations should understand if their target type of employees would move jobs based on purely monetary compensation or do they prefer additional benefits such as flexible working arrangements, safety and security at the work place, a work-life balance, recognition, personal development or various other remuneration



options. This is important particularly to retain knowledge workers as the cost associated with replacing this knowledge far outweighs the cost of retaining them.

The problem is that in reality organisations do not necessarily understand what remuneration preferences are valued by employees. In large organisations investigating each individuals preference is a time consuming task which may not be a priority to the organisation. This results in knowledge workers, who are vital to the organisations acheivement of its strategy and maintaining its competitive edge, leaving because their reward preferences where not well understood.

In spite of the lack of sufficient knowledge workers in South Africa, organisations fail to recognise the importance in retaining the employees they have. If organisations continue to operate in this way knowledge workers, who have much higher levels of mobility, have alternative options to either move to another organisation within South Africa or to leave South Africa. With the increased move towards globalisation organisations no longer only face a threat of their knowledge workers moving within the region they operate instead they now compete for knowledge workers globally.

The WorldatWork Total Reward Programmes was used to evaluate the knowledge workers rewards preferences via a quantitative research study. The "total rewards programme" evaluated both rewards that are monetary based and rewards that are non-monetary based. Monetary rewards comprise of basic and variable pay and the ownership of shares. Other benefits are included in non-monetary rewards. The data was collected via an internet survey. The research was deductive, cross-sectional, mono-method descriptive study. The results were analysed via statistical and descriptive methods.

7.1 Principal findings

Hypothesis 1:

There was no significant difference in rewards preferences based on the knowledge workers age. This was in line with Schlechter, Hung, et al. (2014) where it was also found that demographic variables such as gender, race and age had no significant impact on the outcome of this result. This result is in contrast to the work done by Pregnolato (2017), Wöcke & Heymann (2012) and Khoele & Daya (2014) where there was a significant deviation in rewards preferences noted at different ages.



Hypothesis 2:

There was no significant difference between rewards preferences of high performing knowledge workers versus lower performing knowledge workers. The performance of the knowledge worker therefore had no significant impact on their rewards preferences.

Hypothesis 3:

There was no significant difference between the number of years a knowledge worker worked at an organisation and the number of years they intended to remain at the organisation. This is in contradiction to the study done by Khoele & Daya (2014) which showed that there is a correlation between the number of years an employee is with an organisation versus their retention. The longer an employee is with an organisation the more likely they are to remain (Khoele & Daya, 2014).

Hypothesis 4:

There was no significant difference in intention to stay with the organisation dependent on the knowledge workers age. This is contradictory to many research studies which have shown the age of employees has an impact on employee commitment, job embeddedness, employee's psychological contract and turnover decision. The study done also indicated that younger employees are more eager to leave (Wöcke & Heymann, 2012). Age was shown in some research to have an impact on retention and turnover with younger employees tending to leave whilst older employees stay (Khoele & Daya, 2014).

Hypothesis 5:

From the analysis there is a significant difference for AllBenefits, Flexibility and PerformanceDevelopment preferences based on gender, males or females. This result is in agreement with the outcome found by Wöcke & Heymann (2012). There could be many reasons for the difference in rewards preferences from female requiring more work-life effectiveness due to family commitments, females experiencing the "glass ceiling" in the organisation therefore choosing more development rewards or a host of other reasons.

7.2 Implications for management

Organisations could benefit from understanding their employees preferential remuneration benefits, in particular knowledge workers in order to retain them. Talent management systems need to be implemented in order to gain a competitive advantage through retaining



valuable talent to execute the strategic intent of the organisation efficiently. With the skills shortage currently being experienced in South Africa especially in the leadership, senior management, technical and engineering fields the demand for talent is high. Losing knowledgeable employees has a cost impact from both replacing the employee and attempting to rebuild the knowledge lost.

The problem experienced by organisations is that the best mechanisms to retain and attract talent are not well understood. Organisations incur significant costs including direct costs in loss of productivity, replacement costs, training costs and indirect costs such as loss of human capital, disruption to normal processes and adjustment time when key and senior employees leave voluntarily (Wöcke & Heymann, 2012). In the future the demand for talented employees will far outweigh the supply at all levels within all industries. The following trends regarding retention of talent currently seen such as(Dawn & Biswas, 2013):

- 1) Approximately one-third of business failures can be attributed to poor hiring practice and the inability to attract and retain the correct talent
- 2) The cost of replacing an employee is up to 3 times the cost of the person being replaced
- 3) There is a large cost associated with working around underperformers
- 4) The cost of not attracting and retaining good talent has an number of side effects which cannot be quantified including decreased productivity, lower employee morale and reputational damage

All of these factors reinforce why organisations need to have their retention and talent development strategies in place to retain knowledge workers. Understanding what remuneration preferences are favoured by knowledge workers could enable organisations to retain them. In a previous study investigating total rewards that retain states that employees who have the flexibility of a reward package aligned to their preference are more likely to remain with the organisation (Pregnolato et al., 2017).

Retaining knowledge workers is vastly different than traditional workers as they do not seek life-long employment and security rather they seek skills development and advancement opportunities (Pobst, 2014). These types of employees are vastly in demand as having their skills can result in an organisations competitive edge. Retaining employees is not about revamping compensation systems and paying considerably above market as throwing money alone at valuable employees can be a risky and expensive endeavour (Bryant & Allen, 2013). South Africa is in dire need to retain the knowledge and experience that has been cultivated within the country. Various studies have estimated that the replacement cost of losing a knowledgeable employee can potentially be up to 150% of the annual salary of



the employee (Theron et al., 2014). The loss of individuals includes both psychological and intangible consequences such as a loss of knowledge, experience, disrupted productivity, lower morale and additional stress (Theron et al., 2014).

Globalisation has enabled knowledge workers greater flexibility and higher mobility in the recent years and in a survey done in large South African organisations it was found that global mobility resulted in 21% of the total turnover (Khoele & Daya, 2014).

The turnover of knowledge workers especially in senior and management positions has a detrimental effect on the productivity and profitability of an organisation. "High staff turnover is a cause for alarm, not only because of the costs associated with recruitment, selection and training, but also due to the increasing scarcity of experienced talent" (Khoele & Daya, 2014, page 1). Knowledge workers represent an organisations competitive advantage and the loss of these workers not only results in monetary and knowledge loss but also the unavailability of experienced talent to replace them. South Africa is experiencing a skills crisis in general and retaining knowledge workers is difficult due to their unique attributes. This "scarcity of skills stimulates the open competition for talent and drives turnover higher" (Khoele & Daya, 2014, page 5)

In addition to the high cost of losing an employee has other effects such as work disruptions, loss of valuable organisational knowledge, strategic knowledge, loss in productivity, loss of mentors, diminished diversity and turnover contagion most likely will occur (Bryant & Allen, 2013; Schlechter, Thompson, et al., 2014).

Retaining key employees is critical to the long term success of an organisation (Balakrishnan & Vijayalakshmi, 2014). In addition to the losses that accompany the turnover of knowledgeable employees, South Africa is suffering from a major skills shortage especially in technical fields such as engineering (Rasool & Botha, 2011). South Africa is losing a large number of its knowledge workers which will eventually disable the economy from competing globally (Coetzee et al., 2014; Rasool & Botha, 2011). Employers are forced to compete to gain the talent and skills that are required to accomplish the organisations strategic objectives. An excess supply of labour is no longer available to camouflage ineffective human resource strategies (Dawn & Biswas, 2013).

- A "one-size-fits-all" approach cannot be used to incentivise knowledge workers
- There is a significant difference between reward preferences between the different genders and if the organisation wishes to increase the number of female representatives within its work force these different needs will need to be actively addressed



- Other research showed that age has a significant impact on the retention of knowledge workers. It was not evident amongst the sample of knowledge workers in this large organisation.
- Rewards preferences between high performing knowledge workers and low performing knowledge workers were shown to be statistically insignificant.

7.3 Limitations of the research

- It is assumed that the use of a quantitative method is the best approach for this type of retention study as it was used in previous studies of this nature (Smit, 2013)
- Participants answering the online questionnaire understand the content and what is required of them
- Participants answer truthfully
- The talent of employees will be defined by their last merit rating which was queried in the survey
- The results are based on the current economic conditions of the industry and the South African Economy

7.4 Suggestions for future research

- There is limited research done on the reasons for why people stay or why people leave an organisation in developing countries (Theron et al., 2014).
- The retention of talented, high performing employees in meeting the organisation's key objectives (Theron et al., 2014).
- Reward preferences of knowledge workers in developed countries versus developing countries



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APPENDIX

APPENDIX 1: SAMPLE QUESTIONAIRE

Cover Letter of Consent as per the Green Pages (2016):

I am conducting research on "Remuneration policies impact in retaining talent in an integrated international energy and chemical company". This will help us better understand the importance of Remuneration strategies for employee retention. The survey is electronically accessible and should take no more than 20 minutes of your time. Your participation is voluntary and you can withdraw at any time without penalty. All data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me (Chipp & Chiba, 2016).

Our details are provided below:

Researcher name

Natasha Brigman

25047698@mygibs.com

Research Supervisor

Dr Mark Bussin

drbussin@mweb.co.za



Test Questionnaire

PART 1: DEMOGRAPHIC INFORMATION

1. Age

_____ (years)

2. Gender

М	F
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3. Race

African Coloured Indian/Asian	Chinese	White	Other
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4. Highest Academic Qualification

Grade 12 or Lower	
Certificate or Diploma	
Bachelor's degree	
Post Graduate Degree	
Other	

5. Marital Status

Single	
Long term relationship	
Married	
Other	

6. Family Status

Kids	
No Kids	



7. What job level represents your current position?

Execution	
Optimisation	
Expertise	
Vice President	
Senior Vice President	
Other	

8. Number of years with company:

Less than 2 years	
3-5Years	
6-9 years	
More than 10 years	

9. Length of time you intend to continue working for this organisation:

At most 1 year	
At most 2 years	
At most 5 years	
More than 5 years	

10. Last Merit rating at the company:

X	
D	
F	
E	



11. Operating Model Entities:

Sasol Group Functions (e.g. Finance, Supply Chain, HR, IM,	
Corporate Affairs etc.)	
Energy	
Performance Chemicals and Base Chemicals	
South African Operations	
Group Technology	
Engineering and Capital Projects (Group Technology)	
Planning and Optimisation and R&T	
Sasol Exploration and Production International	
Legal, IP and Regulatory Services	
Governance Compliance and Ethics	
Assurance Services	
Financial Control Services	
Corporate Finance and Business Development	
Investor Relations	
Business Enablement	
Strategy	
Corporate Affairs	
Mining	
Strategic Projects	



PART 2: RETENTION PREFERANCES

1. Compensation:

	Re	Retention preferences/ Level of importance						
	Not at all	Low	Average	Highly	Extremely important	Not applicable	YES	ON
	1	2	3	4	5	6	1	2
Base salary								
Market-related salary								
Short-term Incentive								
Long-term Incentive								
Company contribution to provident or pension fund								

2. Benefits:

		Retention preferences/ Level of importance						Utilization			
	Not at all	Low	Average	Highly	Extremely important	To no extent	Low extent	Neutral	Medium extent	To a large extent	Not applicable
	1	2	3	4	5	1	2	3	4	5	6
Medical aid benefits											
Disability benefits											
Insurance											
Laptop and internet											
Car allowances											
Cell phone allowances											
Personal safety and											



security in the workplace						
On-site canteen						
On-site gym						
On-site crèche						
On-site dry cleaning						
Provident or pension fund						
Counselling						
On-site car wash						

3. Work-Life Balance:

Balance:			ront	ıtilizət	ion						
			-	erenc ortanc		Current utilization					
	Not at all	Low	Average	Highly	Extremely important	To no extent	Low extent	Neutral	Medium extent	To a large extent	Not applicable
	1	2	3	4	5	1	2	3	4	5	6
Telecommuting											
Flexible hours											
Community contribution											
Maternity leave											
Paternity leave											
Study leave											
Sabbatical leave											
Comfortable work environment											



4. Performance Management & Recognition:

	Retention preferences/ Level of importance				Current utilization						
	Not at all	Low	Average	Highly	Extremely important	To no extent	Low extent	Neutral	Medium extent	To a large extent	Not applicable
	1	2	З	4	5	1	2	3	4	5	6
Leadership style of the organisation											
Formal recognition (e.g. payment)											
Informal recognition (e.g. thank you note)											
Performance review											
Performance support											

5. Development & Career Opportunities:

	Retention preferences/ Level of importance				Current utilization						
	Not at all	Low	Average	Highly	Extremely important	To no extent	Low extent	Neutral	Medium extent	To a large extent	Not applicable
	1	2	3	4	5	1	2	3	4	5	6
Career or personal											
development plan											
Organisational climate											
Succession planning											
Training opportunities											
International job											
opportunities											
Mentorship / Coaching											



Bursaries/ funding for						
tertiary qualifications						

6. Rank the most important factors that will influence you to stay at your current organisation from 1 to 5 where 1 is the most important and 5 is the least important factor.

Remuneration	
Benefits	
Work-Life Balance	
Performance feedback	
Recognition	
Development and Career opportunities	
Other:	



APPENDIX 2: TURNITIN REPORT

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APPENDIX 3: CONSISTENCY MATRIX

HYPOTHESIS	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
Hypothesis 1 Knowledge workers rate rewards differently based on their age	(Bussin et al., 2012) (Schlechter, Thompson, et al., 2014) (Hausknecht et al., 2009) (Smit, 2013) (Wöcke & Heymann, 2012) (Khoele & Daya, 2014) (Pregnolato et al., 2017)	Structured Questionnaire	Descriptive analysis One-way ANOVA
Hypothesis 2 High preforming knowledge workers (performance rating excellent performer E) value rewards differently than lower performing knowledge workers (full performer F)	(Bussin et al., 2012) (Schlechter, Thompson, et al., 2014) (Hausknecht et al., 2009)(Smit, 2013) (Trevor, 2001) (Hausknecht et al., 2009) (Schlechter, Hung, et al., 2014)	Structured Questionnaire	Descriptive analysis Independent test for differences
Hypothesis 3 Knowledge workers working at the same organisation for a long period of time rate their preference to remain with the organisation differently compared to knowledge workers with shorter service	(Bussin et al., 2012) (Schlechter, Thompson, et al., 2014) (Hausknecht et al., 2009) (Smit, 2013) (Khoele & Daya, 2014)	Structured Questionnaire	Descriptive analysis One-way ANOVA



Hypothesis 4 Younger age groups of knowledge workers differ in preference to leave the organisation compared to older knowledge workers	(Bussin et al., 2012) (Schlechter, Thompson, et al., 2014) (Hausknecht et al., 2009) (Smit, 2013) (Wöcke & Heymann, 2012) (Khoele & Daya, 2014)	Structured Questionnaire	Descriptive analysis One-way ANOVA
Hypothesis 5 The total rewards preferences will differ between male and female knowledge workers	(Bussin et al., 2012) (Schlechter, Thompson, et al., 2014) (Wöcke & Heymann, 2012) (Jayasingam et al., 2016)	Structured Questionnaire	Descriptive analysis Independent test for differences