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THE PSYCHOMETRIC PROPERTIES OF A TALENT MINDSET INDEX

by

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CONCEPT DECLARATION

I, **Geraldine Welby-Cooke** hereby declare that **"The psychometric properties of talent mindset index for a South African Aviator"** is my own work. All the resources I have used for this study are cited and referred to in the reference listing by means of a comprehensive referencing system.

I declare that the content of this dissertation/ article has never before been used for any qualification at any tertiary institute.

_____ _____

Geraldine Welby-Cooke Date

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ABSTRACT

The talent mindset of an organisation is a critical success factor which can enhance its capability in driving its strategic objectives. For some, the talent of the organisation may not yet have been defined in relation to the long term objectives whilst other organisations have defined talent but experience uncertainty around the linkage of the various talent management practices. The successful organisations are those that not only understand what core talent means to them, but how to leverage the talent in a manner that allows it to act decisively to drive competitive advantage as well as secure the future success of the organisation. These organisations generally embody a talent mindset.

The purpose of this study was to explore the psychometric properties of a talent mindset index which proposes to measure the talent mindset of an organisation through its nine dimensions. The research thus aimed to define the construct validity as well as the reliability of the instrument for usage in business. The ambit of this would be to validate an instrument that could be utilised to establish intervention areas to sustain a talent mindset. Furthermore, the review would allow researchers to further explore the concept of talent mindset, mental models, culture and other related constructs.

The talent mindset instrument was administered to a population of 558 Managers and HR professionals, of which a total sample of 154 was obtained within an organisation in the aviation industry. Only 150 of the response data was considered valid for usage in statistical analysis. The researcher conducted an analysis of the data in terms of the descriptives, ran an exploratory factor analysis and reviewed the reliability coefficients of the index in order to identify the psychometric properties of the instrument.

The findings were that the instrument displayed a low degree of construct validity with the current methodology, as only one factor could be derived as opposed to the nine proposed in the instrument. The instrument was however found to have a high internal consistency (reliability) with a Cronbach alpha of 0.93, after the 30 items representing the factor were tested.

CHAPTER ONE: BACKGROUND AND INTRODUCTION

1.1. INTRODUCTION

"People are not your most important asset, the RIGHT people are" (Own emphasis).
Jim Collins (2001)

The talent imperative has gained momentum as organisations come to the realisation that their intangible assets drive a much stronger competitive advantage than their tangible counterparts. (Forman, 2004; Schmidt & Dharan, 2004). Globalisation and the saturation of markets has created a strong need to find people who can add value and provide organisations with the advantage to be successful and differentiate themselves from their competitors. Talented individuals who truly drive business performance are scarce and, based on this fact, the 'war for talent' was declared. (CIPD, 2006; Frank, Taylor, & Talentkeepers, 2004; Toten, 2008).

This 'war for talent' is fuelled by factors such as globalisation and increasing competitiveness across markets, new business growth lifecycles, the aging workforce, falling educational levels, a decline in younger workers entering, and the quality of the potential workforce in the developing countries (Ashton & Morton, 2005; Chartered Institute of Personnel and Development, 2006; Deloitte Consulting, 2006; Gurthridge, Komm & Lawson, 2008; Ready & Conger, 2007). The 'talent squeeze' is perpetuated by the mobility of talent and the complexity associated with it which is created by factors such as the changing attitudes of workers, the increase of knowledge workers, the relaxed trade barriers as well as enhanced communication across the borders (Ashton & Morton, 2005; Cooper, 2007; Tucker, Kao & Verma, 2006).

This 'talent squeeze' (Ashton & Morton, 2005) combined with the increased need for competitive levers in the market place, has left many organisations puzzled on how to balance the equation of retaining their talent and building capability in order to obtain market leadership. Organisations have responded by creating extreme strategies to attract and then retain talent, often linked to remuneration, which has balanced the market in favour of knowledgeable workers. Companies have created attractive packages with retention bonuses and invested large amounts of capital into developing their prime talent (Cappelli, 2008). "Some sectors [are] experiencing annual wage inflation [of] over 20 per cent (20%)" (Cheese, Thomas & Craig, 2008).

The balance of power has been in the hands of the employee who is skilled enough to add value to the organisation, and who can leave once it is perceived that the psychological contract is breached. Ridderstrale and Nordstrom (cited in Cheese *et al,* 2008) comment that "after a relentless pursuit of talent, many are now stating that there was a war for talent, and that talent won."

Organisation's world-wide are focusing on optimising their talent management practices in the hope that this will provide them with the ability to engage talent in the workplace (CIPD, 2006). Many organisations are failing, even in the midst of attempting to improve their practices, and are confused as to why they are unable to ensure sustainable operations. Practices represent the formalised processes that manage talent, however talent mindset could be the driver of ensuring that these practices makes a substantial difference in attracting, developing and retaining talent. Mindsets are powerful in shaping cultural assumptions and behaviours as well as the outcomes of the developed practices. If organisations do not have the correct mindset towards talent, they already have a disadvantage in their pursuit of this valuable asset (Ready & Conger, 2007).

The study of talent mindsets would be valuable in providing organisations with the insight they need to solve their talent dilemmas. To date, no instrument has been statistically analysed in South Africa with regards to its ability to determine the talent mindset of an organisation. The purpose of this study will thus be to assess the psychometric properties of a talent mindset index. The contribution of validating an instrument for the measurement of talent mindsets in organisations will be invaluable in adding more knowledge to equip organisations as 'talent powered organisations'.

1.2. PROBLEM STATEMENT

Globalisation and the accompanying rapid changes in the environment have been features of the business world for at least 20 years (Cheese *et al*, 2008). Over time, the management of talent became a key focus as organisations realised that in a fast paced and competitive environment, employees play a pivotal role in gaining a true advantage (Chartered Institute of Personnel and Development, 2006; Cheese *et al,* 2008; Lockwood, 2006). "We are in a new stage of globalization where talent and brainpower are becoming the predominant currency" (Cheese *et al*, 2008). Mckinsey's studies amplified the demand placed for talent on a global scale and the repercussion of this demand on business effectiveness (Gurthridge *et al*, 2008; Lockwood, 2006). The researcher noted that published literature appears to be marginally focussed on the deep-seated concept of

talent mindset, but is extensively based on talent practices. This is supported by the critical review of talent management practices, conducted by Lewis and Heckman (2006).

The mindset of an organisation towards talent will affect the manner in which talent is responded to as well as how decisions are made regarding talent. If an organisation has a mindset that talent is considered as crucial to business success, one can assume that this mental attitude will result in investing a large amount of effort into retaining talent and that there would be practices to reinforce the mindset. This mindset will also drive the ensuing behaviours of the managers within the organisation towards talent. It is a known fact that managerial-employee relationships are a key determinant of employee engagement (Cheese *et al*, 2008) and retention – an employee generally leaves a manager and not necessarily the organisation (Foreman, 2007; Frank *et al*, 2004; Sloane, 2009). Engagement and retention also have a direct impact on work outputs, customer retention, business profit and the holy grail of competitive advantage. (Cheese *et al*, 2008) "Engaged employees have a considerable impact on the performance of an organisation. The reason for this is that engaged employees are more likely to work harder and go the extra mile, be more creative, service customers better and with more enthusiasm and stay with the company for longer" (Guest, 2009).

Many researchers have tested the relationship between engagement which is the managerial dream and business outcomes or performance (Accenture, 2004; Creelman, 2004; Guest, 2009; Lockwood, 2006; The Corporate Leadership Council, 2004; The Forum for People Performance Management and Measurement, 2004; Towers Perrin Study, 2005; and others).

In this study, it is proposed that the deeper underlying determinant of engagement and job satisfaction would be an organisation's talent mindset. To date, no instrument has been statistically analysed in the South African market for its ability to measure the construct of talent mindset for application in business. If an organisation can obtain an index against which to benchmark its talent mindset, it would be able to take remedial actions to transform this into a positive talent mindset, resulting in a more engaged and productive workforce. The instrument will also assist in targeting and prioritizing specific interventions required, in order to improve the mindset of an organisation towards its talent.

In the South African market, it is acknowledged that the country is a developing nation and that the skills profile in terms of age is inverted to the developed nations. African countries in fact have a

large influx of the younger generations entering the work place; however their skill sets leave much to be desired. The concern is that these younger employees are generally lacking the capabilities to perform effectively in the workplace as talent due to a broad lack of skills in the market. In addition to this, the impact of the recession on the South African market has been such that organisations have retrenched without consideration for strategic identification of talent that can drive competitive advantage into the future. This is indicative of the potential lack of a talent mindset. The skilled sector of the South African workforce is also under threat based on the need of the developed countries such as Australia and the United States to attract talent from foreign nations based on their own skills shortages. The so called 'brain drain' of South Africa has become critical with thousands of highly skilled and talented individuals leaving the country for 'greener pastures' (The South Africa Migration Project, 2000). South African organisations therefore have a stronger mandate to ensure that their mindset towards talent drives the effective attraction, development, engagement and retention of talent. The development and usage of a talent mindset index will hopefully result in organisations taking a proactive approach in building their competitive advantage which will uplift the South African economy in its competition against global markets.

The aim of this study is to establish the psychometric properties of a measuring instrument, the talent mindset index, in order to accurately identify an organisation's talent mindset. This research will provide further impetus for exploring talent mindset and its link to variables affecting business success. The determination of talent mindset will significantly influence how organisations approach the war for talent and the quest to build human capability within an organisation. This study will provide researchers with the opportunity to utilise a tested instrument to further explore the impact of talent mindsets on an organisation and its employees. Currently, there is limited research on talent mindset as a construct and this research will therefore add more to the knowledge available on the topic.

1.3. RESEARCH QUESTION AND CHAPTER OUTLINE

The aim of this study will be to assess the psychometric properties of the talent mindset index.
The two research questions posed in this regard are therefore:

- Does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?
- Is the talent mindset index reliable?

In order to answer these questions successfully, the following approach is utilised in the chapters of this dissertation:

CHAPTER TWO: LITERATURE REVIEW

The literature review is aimed at achieving the following:

- Develop an understanding of mental models, paradigms and mindsets
- Understand the history of mindsets/ mental models towards talent
- Develop a clear definition of talent and talent management
- Develop an understanding of talent management and its related practices of attraction, deployment, development and retention
- Develop a conceptualisation of talent mindset and its relationship to culture, practices, and the custodians of these factors
- Review what the influencing perspectives are in relation to the talent war in terms of demographics, age differences identified through generational influences, and skills availability.
- Understand what the impact of talent management is on business effectiveness
- Review the influence of leadership on mindsets

CHAPTER THREE: METHOD OF INVESTIGATION

This chapter is focused on discussing the methodologies utilised to conduct the research. This entails a review of the purpose of the analysis, the research design and its various elements, as well as the statistical methods that were utilised in the analysis of the data.

CHAPTER FOUR: RESULTS

The results from the statistical analysis are presented in this chapter; which will include all relevant statistical outcomes as well as a description of the relevant tables and figures.

CHAPTER FIVE: DISCUSSION

The results detailed in chapter four are interpreted and discussed in this section. The outcomes of the research will be provided to answer the research question. The research paper will be concluded with the recommendations for further studies as well as for optimisation of the completed research approach.

CHAPTER SIX: ARTICLE

This chapter contains the article representing the details of this study.

1.4. CONCLUSION

Chapter one has provided the background for this study as well as the motivation for completing the research. The problem regarding talent and the corresponding mindset of organisations towards talent was discussed. The available literature will now be explored to provide a conceptualisation of the various factors that need to be considered in this study.

CHAPTER TWO: LITERATURE REVIEW

2.1. INTRODUCTION

This chapter provides an overview of the literature related to talent management in terms of its mental models, history, specific practices, talent culture and, importantly, talent mindsets. The factors contributing to the talent war are also examined in detail. Lastly, the influence of organisational leadership on talent management and more appropriately talent mindset is examined.

2.2. MENTAL MODELS AND MINDSETS

This section is aimed at understanding mental models and mindsets as the platform of the literature review.

Mental models were first defined in 1943 by Craik, “who recognised that knowledge and understanding operate through the application of ‘working models’ of particular phenomena in an individual’s mind” (cited in, Spicer, 1998; Hudson, Not dated). In order for individuals to process information and to explain and give meaning to (Chinastaff, 2009) reality, they form mental models. Mental models have been referred to by many as assumptions and generalisations about external reality which are formed by individuals (Chinastaff, 2009; Senge in Spicer, 1998; Blackman & Lee-Kelley, 2006). Senge (cited in Spicer, 1998) noted how mental models can be deeply ingrained and consist of an individual’s specific experiences, perceptions and beliefs as well as personal influences such as socio-economic and cultural backgrounds. These models influence how people understand their world (Spicer, 1998) and are thus very different for different people.

Mental models are created to support a paradigm which according to Kahn (cited in Duffy, 2009) is an intellectual shift that changes the way of thinking or a world view held over a period of time. Smith (not dated) reflects as to how mental models are formed based on historical occurrences of successes in an individual’s experience and subsequently are viewed as the absolute truth. They are in fact denoted to be the mechanism within which a culture is stored. (Smith, Not dated).

Mental models have unique characteristics:

- Mental models consist of an individual's perceptions of what reality is, this perception is not necessarily accurate though (McDaniel, 2003; Smith, not dated)
- Mental models provide individuals with some type of indication of the consequences of their actions (McDaniel, 2003).
- "Mental models are simpler than the thing or concept they represent. They include only enough information to allow accurate predictions" (McDaniel, 2003).
- They are formed on the basis of processing information more simplistically (Smith, not dated) and can be seen as a representation of understanding (Spicer, 1998).

It can be deduced that this simplification is of the overarching paradigm under which an individual functions and, therefore, mental models are ultimately created to support paradigms (Duffy, 2009)

"It is possible to see a mental model as providing a framework which directs and controls and individual's decision making process…" (Spicer, 1998). Can it also then be argued that mental models then form the basis of mindsets? Literature shows that mindsets are in fact based on mental models which have been reinforced over time by their consistent and successful utilisation. These mindsets are referred to as "hardened attitudes about the value and effectiveness of the paradigms and mental models" (Duffy, 2009). Mindsets can lead to the resistance of new knowledge and ideas (Duffy, 2009) whereas a mental model can be changed through the introduction of new knowledge that individuals accept as true (Spicer, 1998). It has been argued that mental models are unstable and that they actually have an "ever changing nature" (Norman, in Spicer, 1999). This is consistent with the argument that paradigm shifts occur at a relatively peaceful rate with bursts of new knowledge which lead to transformation of a world view (Duffy, 2009).

Duffy (2009) provides a framework for understanding the relationship between paradigms, mental models, mindsets and behaviours. This framework denotes mental models and paradigms as reflecting a way of thinking, whereas mindsets reflect beliefs and behaviours reflect the actual actions taken, the doing. "Given a dominant paradigm, its related mental models and the mindsets supporting the paradigm and mental models, individuals, groups and entire [organisational systems]…begin to devise strategies for how to behave within the dominant paradigms and about how to implement effectively their chosen mental models" (Duffy, 2009). Individuals proceed to implement observable behaviours which reflect their chosen strategies. If these behaviours are successful, the paradigms, mental models and mindsets are reinforced.

The abovementioned framework can evolve further into understanding culture formation which will be reflected in proven behaviours which are reinforced within the group over time and become the 'way we do things around here' (This is discussed and defined more explicitly in sections to follow).

Figure 2-1: Framework (Duffy, 2009), below was adapted from Duffy (2009).

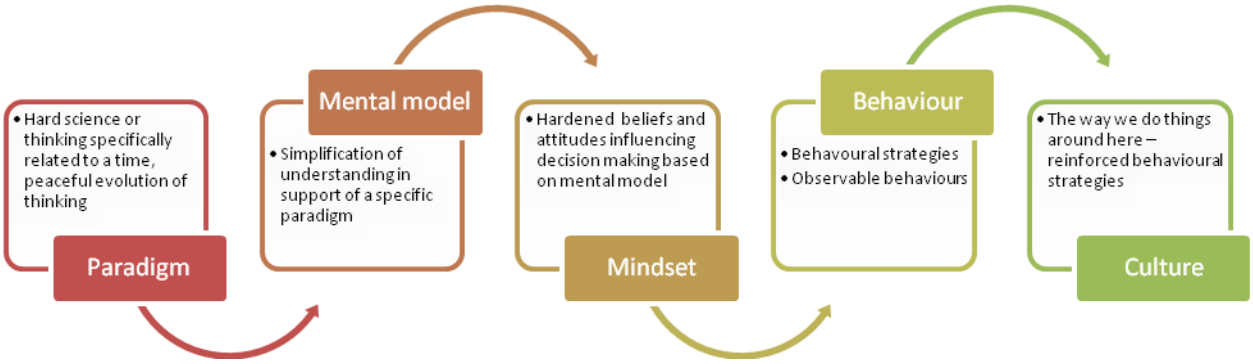

Figure 2-1: Framework (Duffy, 2009)

From a more specific organisational perspective, it is stated that mental models directly affect the performance of an organisation (Lesey, Meisinger & Ulrich, 2005) in the form of experiencing either "knowing-doing problems" or "doing-knowing problems". These two problems are cited by Lesley *et al* (2005) to consist either of an organisation knowing best practice and not implementing this based on own past experiences – the way we doing things around here - or alternatively not doing those things that require attention based on evidence. These two occurrences of behaviours are directly attributed to the mental models or the mindsets that an organisation holds.

It has been acknowledged that "current mental models act as filters determining what will be learnt" (Blackman & Lee-Kelley, 2005) and to this effect can explain why organisations fail to adjust in the midst of change. Mental models that are entrenched as hardened attitudes and beliefs (mindsets) are stronger than new knowledge experienced and thus the status quo remains unaltered (Blackman & Lee-Kelley, 2006). It is also possible that knowledge is not directed at changing mental

models. It is for this reason that "HRD professionals should be seeking to develop systems that will actively confront the current mental models thereby keeping them open, and encouraging 'self-confrontation." (Blackman & Lee-Kelley, 2006). If these systems of new information successfully confront current mental models, they will support changing the mindsets held by individuals. It can be hypothesized that this should lead to a change in culture over time.

It is crucial for organisations to come to the realisation that mental models and mindsets can determine organisational success, especially when it is considered that organisational practices rely on human behaviour and the inherent beliefs of individuals (Losey, Meisinger, & Ulrich, 2005). It is also highlighted that mental models are implied by "an organisation's ongoing practices, which creates an interesting link for the rest of this literature review where talent conceptualisations of practices, mindsets and culture are considered" (Losey *et al,* 2005).

The next section will review the mental models and mindsets held over time in the world of work and how these evolved to the current point of talent management.

2.3. THE HISTORY OF MINDSETS TOWARDS LABOUR

This section will provide an overview of how mental models and mindsets towards workers have changed from just before the onset of the industrial revolution through to the current era of talent management. For the purposes of the review, mindsets will be referred to with the understanding that these were created by mental models and the paradigms (such as the human relations movement). "Talent management practices have developed and adapted throughout the years in response to many changes in the workplace…" (Frank, Taylor & TalentKeepers, 2004). The history of how practices evolved could be traced from as early as 1776 with Smith's principles of division of labour which were incorporated in the pin manufacturing industry (Robbins & Roodt, 2009) The review of literature will, however, not necessarily focus on each individual who had an impact on labour practices but rather will endeavour to highlight how the world of work and the value of labour have advanced.

Firstly, a special mention is made of Robert Owen whom in 1789 already noted that the manner in which the factories were operated was extremely harsh and degrading to the workers (Robbins,

2003). He strongly criticised factory owners for treating their equipment better than their employees and argued that one of the best investments that stakeholders could make was to spend money on improving labour. He rationalised that showing a concern for the wellness of employees would be to the benefit of both management and society (Robbins, 2003). Management would reap the benefits of increased profitability whilst the employees would be relieved from the poor working conditions.

This is noteworthy when considering that he was more than a hundred years ahead of his time in arguments and actually already displayed the beginnings of a 'talent mindset' appropriate to the times. Employees had to first be acknowledged as more valuable than the machinery in sustaining an organisation's competitive advantage for this type of thinking to be considered, but they were not. The trends from the classical era through to the current thinking will be reviewed next.

In the early 1800's, the industrial revolution was said to have transformed the world of work (Young, 2009). Although there was a strong advent of new technology, the primary impact of the industrial revolution was on the social systems as the "economy was transformed from a household, family-based economy to an industry-based economy" (Hooker, 1999). Work primarily occurred within the agriculture sects before the introduction of factories, hence the manner in which labour, consumption and social structures were approached changed significantly (Hooker, 1999).

Ultimately, the mindsets towards 'work' changed and the way that work would be completed in the capitalist economy was defined with significant consequences for labour. The introduction of the factories added a new level of complexity where labour, information as well as material had to be dealt with simultaneously (Young, 2009). The role of the manager was born but productivity within the environment remained low. The work outputs consisted mainly of low level manual labour predominantly focused on simple task completion.

Fredrick W Taylor introduced the concept of Scientific Management which based the management of labour on the principles of the management of machinery. The key motivation for his studies was that he had witnessed how employees purposefully worked slowly in the factories and he theorised that the work output was only one third of what it could be (Robbins, 2003). Taylor was vastly concerned with determining the 'one best way' for completing a job and he analysed the variables that would lead to increased productivity. One of the conclusions he reached, was to "restrict the behavioural alternatives" (Wertheim, 2008) facing workers by eliminating the need for workers to participate and exercise judgment in "planning, organising [and] controlling" (Wertheim, 2008). He

studied the principles of how a task could best be completed through analysing motivation of workers through incentives, the role of management in determining the best way to complete the job as well as the very specific process of completing a task. Taylor was one of the "first [to] attempt to systematically analyze human behavior at work" (Wertheim, 2008).

Taylor's research led to various conclusions of which one was that managers needed to remain in control of the activities whilst the workforce would continue to adhere to the relevant instructions provided to them. This thinking increased the production within factors by almost two hundred percent and sometimes more (Robbins, 2003). Young noted that Taylor redesigned work into simple tasks and that this led to increasing productivity almost fourfold (Young, 2009).

In summary, the mindset that resulted in the thinking was that workers are of equal value to machinery and that they could be managed by utilising experts (industrial engineers) to determine optimal working conditions as well as to establish the exact science of how to complete the smallest components of work effectively (Wertheim, 2008) The assumptions were furthermore, that people try to satisfy only their economic needs at work and that they would act individually to satisfy individual needs. It was also expected that no conflict would exist between individual and organisational objectives (Wertheim, 2008).

In the 1930's Max Weber developed his Bureaucratic Management Theory (Young, 2009). It led to the definition of organisational structures that are in some cases still utilised today – strong hierarchical structures which acted as a control mechanism to establish authority (Young, 2009). The bureaucratic organisation focused on the "functional division of labour based on functional specialisation [with a rational] allocation of tasks" (Wertheim, 2008). This type of structure tightly managed tenure which was governed by legislation and also created strong rules which controlled organisational behaviours (Wertheim, 2008).

Two theorists saw the importance of the social aspects of organisations, namely Mary Follett and Chester Barnard whose work was only recognised in the 1930's. (Robbins, 2003) The detail of their work is not covered in this review but it is important to mention their contribution to the change in mindsets. Both theorists shifted the focus to the importance of individuals and their roles in organisations. Follet was a social philosopher who emphasised the importance of team work on motivation (Robbins, 2003). She also argued that managers need to utilise their expertise to gain

power in leading employees as opposed to hierarchical driven authority. Her ideas influenced thinking about "motivation, leadership, power and authority" in organisations today (Robbins, 2003).

Chester Barnard was a practitioner who viewed organisations as "social systems that require human cooperation" (Robbins, 2003). His main contribution was that he argued that "success depended on maintaining good relations with people" (Robbins, 2003) and he acknowledged the criticalness of the external environment.

From 1913, Hugo Munsterber developed tests from a cognitive and emotional perspective with the aim to match individuals to their roles (Felice, 2008). The fact that individuals were tested indicated an acknowledgement that there was human variability which could be matched to a role. It could be theorised that this contributed to developing the thinking that individuals added value to a role inherently based on their competencies and skills. "He argued for the scientific study of human behaviour to identify general patterns and to explain individual differences" (Robbins, 2003). Munsterber has thus been accredited to give birth to the discipline of Industrial Psychology.

In the period between 1930 and 1970, the HR department was born, essentially driven by the Human Relations Movement which attempted to put more focus on individuals and their contribution to decision making (Robbins, 2003; Young, 2009). "Labour/management conflict, apathy, boredom and wasted human resources" (Wertheim, 2008) led to a critical review of Scientific Management. For the first time it appears as if workers were broadly acknowledged as being able to provide a valuable contribution to the organisation's direction. The relationship between employee morale and supervision was acknowledged and this initiated discussions about "employee empowerment, teamwork and psychological motivation" (Felice, 2008).

The assumptions of the human relations movement as summarised by Wertheim (2008), were that employees were motivated by many needs and that behaviour is also often shaped by social context. Furthermore, there is not automatic correlation between individual and organisational needs and job satisfaction would ultimately lead to higher job productivity (Wertheim, 2008). Another critical acknowledgement was that leadership would be required to include concepts of human relations, focusing not just on technical economic outcomes but rather a dual focus on the social components of a job, leading to empowerment of employees (Wertheim, 2008). A number of theorists contributed to the human relations movement. Their work will be briefly reviewed to assess the impact on the mindset towards workers.

The Hawthorne studies conducted by Elton Mayo in 1932 were critical to the establishment of the human relations movement (Robbins, 2003). In his studies at the Western Electric company, Mayo concluded that human factors were often more important than physical conditions in motivating employees to greater productivity (Burke in Frank *et al*, 2004; Robbins, 2003). The studies created a need to change the traditional management of employees to a more participative focus, allowing employees to contribute to "solving organization problems" regardless of hierarchical constraints (Wertheim, 2008). Following these studies, in 1954, the hierarchy of needs theory was published by Maslow which provided "a framework for gaining employees' commitment" (Felice, 2008). Maslow made the assumption that people want to fulfil a variety of different needs in general ranging from survival to self-actualisation. Managers could utilise their knowledge of the needs satisfaction pyramid to develop strategies to motivate their subordinates. In the same period, job enrichment and job enlargement were explored and it was believed that employees would commit more to an organisation if they experienced increased satisfaction from their jobs (Price, 2004).

Herzberg's Motivation-Hygiene theory further amplified the movement to focus on meeting individual needs but was focused more on the factors of the 'workplace and job design' (Grobler, 2002). Herzberg observed that the factors at work which led to job dissatisfaction (hygiene factors) were not the same as those that contribute to the satisfaction levels (motivators) of employees. He identified that organisations need to maintain certain conditions to avoid dissatisfaction but that these conditions would not assist in motivating workers (Grobler, 2002). The theory provided managers, once again, with a framework within which to manage their employees, maintaining the idea that satisfaction and dissatisfaction are distinct and separate dimensions.

In 1960, the Theory X and Y was established which defined the set of assumptions which reflected the underlying attitudes and beliefs of managers regarding employee behaviour (Wertheim, 2008). This provided a reflection of the times and the regard for the workforce. Ultimately, Theory X can be said to have reflected the scientific management principles and beliefs which drove the theory. It maintained a largely negative view of the workforce, assuming that people were not motivated to work, had little ambition, would not take responsibility, and they required coercion to achieve organisational objectives (Grobler, 2002). It also made the assumption that most employees had little capability to solve organisational problems. Theory Y, however, reflected the ideas of the human relations movement, that employees considered work to be an important part of their lives

and that they would work towards goals to which they were committed (Price, 2004). Furthermore, people have the potential to help accomplish organisational goals (Robbins, 2003).

“Managers effectively began to realise that the solution to productivity problems did not lie in either the job or the employee, but a combination of the two…. Managers became concerned about both the job and the worker and saw productivity as a result of properly matched jobs and people.” (Blaird in Felice, 2008).

Scientific Management’s assumptions were challenged and in books such as Jim Collin’s Good to Great (Young, 2009) as the economy was increasingly functioning in a post-industrial age. Essentially the post industrial age represented the movement from industries dominated by manufacturing to an economy which was more service orientated (Wikipedia, 2009). “Automation also resulted in a decreased requirement for manual labour, this is signified today by the introduction of the dark factories by the Japanese – these are factories which have no human labour at all” (Cheese *et al*, 2008). This resulted in a decline in the demand for the traditional practically orientated blue collar worker skill set (assembly line workers) and a subsequent significant increase in service orientated positions such as lawyers and computer specialists as well as scientist roles (Wikipedia, 2009).

As the need for theoretical knowledge, as opposed to empirical knowledge, and manual labour increased, people were recognised as the custodians of knowledge (Wikipedia, 2009). “Knowledge workers were also identified as those employees who have the ability to create new knowledge utilising existing knowledge (Cheese *et al*, 2008) to aid problem solving and innovative thinking. The characteristics of knowledge workers were summarised by Cheese *et al* (2008). These included the need for autonomy, problem solving ability and a high level of work complexity (ability to view existing information in a new light).

Knowledge workers have also been acknowledged to create up to three times more profit than other employees do (Gurthridge *et al*, 2008). Organisations thus started acknowledging the need for “work-life balance, employee engagement and empowerment, organic organisations, stewardship and servant leadership” (Young, 2009) as methods to retain their resources. Davenport (cited in Cheese *et al*, 2008), states that knowledge workers “are going to be the primary force determining which economies are successful and which aren’t. They are the key source of growth in most organisations”.

Initially the introduction of talent management itself has been isolated from the business strategy and it has often been the case that HR functions operate in silos with regards to people practices. The focus now however is on Talent Management practices which meet the business strategy and are not only aligned but completely integrated (Jones, 2007).

The above movement and evolution of theories accurately reflects the mindsets of those times. Resources which could be trained on the practical know how of the scientific management era were freely available and, up until the 1980's where downsizing of the workforce became prominent, were willing to stay with one organization for their whole working lifetime (Felice, 2008). However, it has been noted in general that the rampant onset of retrenchment due to organisational downsizing changed the mindsets of employees to seek more personal security by choosing their own career paths within a variety of organizations as opposed to being dedicated to solely one organization.

Those employees, who had the newly sought theoretical knowledge required in the post industrial age, were more mobile in their careers and were considered a scarcer resource than their practically orientated counterparts. "Employees with varied skills and competencies will be valued more highly than those with a depth of expertise in a single area" (Felice, 1998). This, coupled with the increasing amount of change which managers faced as well as the high expectations to deliver improved business performance, shifted the focus more strongly to the retention of key players who made a valuable contribution to the business.

Cheese *et al* (2008) comments on how the first phases of globalization were focused on moving production to developing countries in order to reduce costs whereas now it is a multi-polar world – it has evolved to "going where the talent is, where the resources are, and where the markets are, connecting up people and processes globally and breaking down traditional barriers".

The current reality is that the workforce is shrinking rapidly and simultaneously there are fewer skills available to meet the demands of the knowledge era. "Individuals are also more virtual, globally mobile, diverse and extremely independent and empowered in the workplace" (Tucker *et al*, 2006). "Talent Management is also driven by the anticipated skills shortage in the coming years" (Lockwood, 2006).

Organisations will require talented individuals to drive real value and sustained business performance (Cheese *et al,* 2008). Talent is those individuals who define a competitive advantage for an organisation. The unfortunate fact is that organisations would love to focus on performance enhancement but the reality is that skills that are considered to create a competitive advantage are scarce and that the creation of skill is now a priority. If an organisation does however find a highly skilled individual, its efforts should be focused on retaining and developing these skills to contribute to internal capabilities. Organisations however still do not necessarily have the correct mindset to achieve this. Furthermore, they are still employing practices from the personnel control model with a few organisations utilising the people development model as opposed to one where talent is strategically multiplied to add value to the organisation. (Cheese *et al*, 2008).

Organisations have, however, embarked on various talent management initiatives, so many in fact that some managers now "seem to regard talent management like the weather - everyone complains about it but no one does anything to fix it" (Toten, 2008). It appears as if there has been an investment of time and resources into talent management initiatives by senior executives which have not had much impact (Ashton & Morton, 2005; Toten, 2008), however most have also been based on short term tactical views (Gurthridge, Komm & Lawson, 2008) and quick fix solutions. It has been noted that this is indicative of a short term mindset towards talent. In other words everyone has acknowledged that talent is important but the time and energy has not been invested with a long term strategic focus of managing talent (Gurthridge *et al*, 2008).

For the purposes of this study, it can be deduced that this is potentially the current mindset – talent is important to our future but not as important as it is to my 'here and now'. "Habits of the mind are the real barriers to talent management" (Toten, 2008). Organisations often focus too much on the systems as opposed to the mindsets behind a problem to resolve it (Gurthridge *et al*, 2008).

The concept of tangible versus intangible assets will be briefly discussed next to obtain insight into the noticeable shift in focus of what an organisation regards as value.

2.4. TANGIBLE AND INTANGIBLE ASSETS

In the time of the industrial era, emphasis was placed on an organisation's tangible assets. Tangible assets are those assets that "have a physical existence, such as cash, equipment, and real estate" (www.investorwords.com, not dated).

The perspective of the time was that equipment, vehicles, buildings and their locations or a combination of these resources, would add true competitive advantage to an organisation (Cheese *et al*, 2008) and that workers were merely a means to an end. As the world moved increasingly into the post-industrial economy focused on service delivery, the value of the minds of the employees to business increased. Growth in the services industry resulted in significant changes to the manner in which work was conducted in the economy and subsequently also to what was considered as value (Cheese *et al*, 2008). The increase in competition and high availability of technology made it increasingly difficult to be market leaders based solely on tangible assets. It became easier to replicate tangible assets and therefore this enabled organisations to compete on the same 'playing fields', thus there were limited opportunities to derive a true competitive advantage.

As organisations struggled with finding ways to differentiate themselves from their competitors, the focus shifted to the utilisation of their intangible assets. An Intangible asset is "something of value that cannot be physically touched such as a brand, franchise, trademark or patent" (www.investorwords.com, not dated). Another definition acknowledges another critical intangible asset; "that part of a company's real worth formed by its staff and their skills, knowledge and creativity – fundamental sources of wealth and value" (Tempus, 2002). Cheese *et al* (2008) emphasises that intangible assets consist of an organisation's knowledge, the knowledge of its processes in production, services, as well as the knowledge of the market. It also consists of the relationships an organisation holds with stakeholders such as its customers and suppliers.

Table 2-1 indicates the number of different types of intangible assets as defined by Weatherly (2003). Essentially all of these factors are generated by talent (Cheese *et al*, 2008). Intangible assets are considered to enhance a company's position in the marketplace and organisations have recognised employees as one of the key differentiators of value within the market.

Employees of the organisation could add true value through their abilities, skills and knowledge. Important to note is that these grow with time unlike tangible assets which depreciate (Foreman, 2007). Twenty five years ago, 85% of an organisations assets represented tangible assets as its

value, today this consists of only approximately 20 -30 %. (Cheese *et al*, 2008). The graph in figure 2-2 reflects the increase in value of intangible assets to an organisation over time. According to this figure, ten years ago, the values of intangibles were considered to constitute 85% of an organisations true value, which confirms the comments by Cheese and his associates (cited in the Human Capital Institute, not dated). The key to creating this value, which cannot be replicated by competitors, lies in not just the creation of company strategy, but the effective execution thereof by the talent of the organisation.

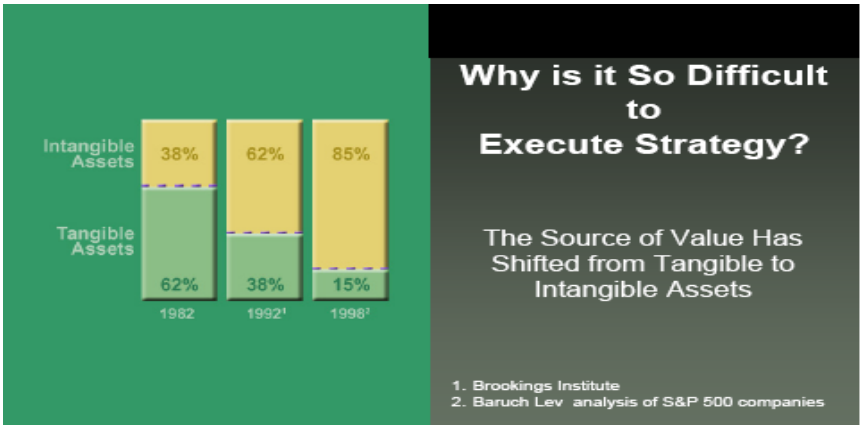

Figure 2-2: The value of assets (in the Human Capital Institute, not dated)

Table 2-1
Types of Intangible Capital (Weatherly, 2003)

Type of Intangible Capital	***Description***	**Examples**
Human Capital	The collective knowledge, experience and attributes of employees that they choose to invest into the workplace	Tacit Knowledge Education Work related know how Work related competencies
Structural Capital	The codified knowledge that resides in an organisation	Intellectual property Methodologies and policies Patents Copyrights
Social Capital	The relationships within the organisation to facilitate the transfer of knowledge (social networking)	Mentor-mentee relationships Collegial relationships Team relationships Culture
Organisational Capital	The company's external relationships	Licence agreements Distribution channels Customers Brand Credibility

Cheese *et al* (2008) suggests that the factor that may increase an organisation's market value, is the ability to effectively manage all of its intangible assets. This is confirmed by Foreman (2007) who contends that employees account for approximately 80% of an organisation's market value. Organisations are still however operating on the Generally Accepted Accounting Principles (GAAP) which marks intangible assets as expenses which leads to a decrease on the earnings per a share which is accounted for in organisations. This is a reflection of how the philosophies and standards are still being based on balance sheet entries which are outdated (Forman, 2004). Unfortunately the degree to which executives are willing to invest in human capital is diminished based on the perceived lower value thereof - spending money on employee development such as training is viewed as a cost whereas money spent on equipment is viewed as a 'productive investment' (Cheese *et al*, 2008).

There has been a movement towards attempting to measure the Human Capital of an organisation, with the mindset that these measures would form part of the organisation's accounting practices. This is not an easy task and the value of human capital cannot be measured directly, but it still has a rippling effect on the organisation's service or productivity (Creelman, 2004). Unfortunately, even though the perception exists that employees are our most valuable asset, no one is certain as to how much this 'asset' is worth (Creelman, 2004). The focus now is shifting to focusing on what the organisation's strategy is and then to invest in the human capital initiatives that will enable the organisation to achieve that strategy (Creelman, 2004).

The next section will focus on more clearly defining what is considered to be talent as well as the management thereof.

2.5. TALENT CONCEPTUALISATIONS

2.5.1 DEFINITION OF TALENT AND TALENT MANAGEMENT

Collins (2001) made a statement, "People are not your most important asset, the RIGHT people are (own emphasis). The above quote reflects what organisations today define as talent in a nutshell. A further investigation of the constructs of talent and talent management will be conducted in this section.

Talent is considered as those people who can add value to the organisation through the application of their skills, abilities and knowledge to the strategic direction of the organisation (Duttagupta, 2008). It is any employee with the ability to impact the organisation positively now and in the future, with the ability to add value (Morton, 2004). Talent can also be defined as "a recurring pattern of thought, feeling, or behaviour that can be productively applied" (Duttagupta, 2008). Having the right match between a person with talent and a role in an organisation would therefore be the key to excellent organisational performance. The top talent in an organisation would contribute to the value delivered to the customers in its services and products, thus differentiating the organisation from its competitors. The manner, in which an organisation defines its talent, is specific to its business requirements and perspectives regarding talent. Organisations will require talent that have the ability to meet the business strategy and as an organisation matures its business strategy will change. It is thus expected that the organisation's definition of talent will also change in alignment with the new strategy. It is for this reason that there is not necessarily a single consistent or concise definition (Ashton & Morton, 2005). "As the drivers change, so will the definitions of talent" - talent is thus viewed as a 'strategic differentiator' to a business (Ashton & Morton, 2005).

It is interesting to note that previously employees were referred to as labour, however as pointed out by Cheese *et al* (2008), labour is "subject to the law of diminishing returns" and the term was originally utilised for economical purposes. Talent, however, can be increased to define or contribute to an organisation's competitive advantage.

Weatherly (2003) termed a company's human capital asset as the combined sum of energy, zeal, life experiences, knowledge, creativity, and attributes that its employees choose to invest in their workplace . Foreman (2007) noted that employees are not the human capital but rather the owners of the human capital asset and therefore have a choice as to whether or not to share this with the organisation. Organisations thus have to create an environment within which employees will spontaneously want to share their human capital or talents. This brings us to the point of discussion around talent management.

The management of talent is a concept that focuses on defining both strategic and tactical practices which empower the spontaneous sharing of human capital asset by its employees. Some researchers would link this to an employee being engaged in the workplace (Cheese *et al*, 2008; Guest, 2009). It is clear that talent management is critical to ensure that an organisation's talent improves operational excellence as well the ability of the organisation to achieve its strategic

objectives (Ashton & Morton, 2005). What exactly is talent management then? Talent management can be defined in many ways, depending on the context. Essentially the goal of talent management would be to ensure that the right skills are available at the right time and place to meet the strategic objectives of the business. Therefore, it is concerned with the flow of talent through an organisation (Duttagupta, 2008). This does represent good HR practice but is differentiated by the fact that talented individuals are identified to contribute to the service profit chain.

Creelman (2004) refers to talent management as the tools and technology utilised by an organisation to make decisions regarding talent. Talent management, however, does not solely focus on the practices or technology required to meet its overall goal but operates at a strategic, integrative level and is deeply affected by the framework which leaders of an organisation have regarding the importance of talent to the effectiveness of the business (Cheese *et al*, 2008; Duttagupta, 2008; Morton, 2004).

"Talent management is the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilizing people with the required skills and aptitude to meet current and future business needs" (Lockwood, 2006). Ashton and Morton (2005), define talent management as "the integration of different initiatives, or constructs, into a coherent framework of activity". They also consider a number of elements as essential in defining talent management, which are listed below:

Table 1-2
Talent Management Elements (adapted from: Ashton and Morton, 2005)

Element	***Element Description***
Talent Mindset	The inherently held values and behaviour that demonstrate the premise that individuals have potential that is considered worth investing into and developing for the organisation.
Differentiation	Knowing which roles make a difference to the organisation and ensuring a correct person-job-time match.
Positioning	Ensuring that talent is owned by the line management and enabled by HR as opposed to full accountability resting within the human resources function.
Structure	Having the necessary enablers of talent management (tools, processes and techniques) to ensure governance and accountability with the aim of meeting business objectives.
System	Ensuring that sustainable platforms are created to house knowledge on talent and manage the talent within the predefined frameworks

As can been seen in Table 2-2 one critical component is the underlying mindset regarding talent. Most research on the definition of talent management has been defined by consultants as opposed the academia, which creates a risk that talent management will be considered as just another fad or attempt to redefine human resources. The definitions of talent are currently generic with a focus on HR programmes or alternatively focusing only on high performing talent (a narrow focus).

Organisations are also focusing on integrative talent management (ITM). One stakeholder in Jones (2007) defined ITM as "looking at talent management processes and initiatives as a system of interrelated parts that helps a company to strategically leverage their talent".

This section reviewed the definition of talent and talent management. The specific practices or processes related to talent management will be examined next.

2.5.2 THE ART OF TALENT MANAGEMENT

In this section, the literature regarding the importance and application of talent management will be reviewed, followed by an overview of the specific talent practices in the arena.

a) The condition of talent management

Talent management is extensively influenced by external factors such as the economic arena, globalisation and mergers and acquisitions (Lockwood, 2006). It is also extensively driven by the following factors:

- CEO commitment
- Alignment with business strategy
- Line managerial commitment to developing talent

Cheese *et al* (2008) highlighted five talent imperatives which will form the pinnacle of an organisation's success namely.

- Talent is a strategic issue which forms an essential part of the business strategy, Organisations need to understand and believe this.
- Diversity in talent is a key driver of meeting business strategy and is therefore critical;

- In order to build the skills and competencies in the organisation, it has to be a learning organisation.
- In order to optimise business performance, the engagement of all the employees is key.
- Everyone in the organisation is accountable for talent – a talent mindset and culture must be embedded in the business.

Reflecting on the above mentioned pinnacles, it is important to note that organisations tend to have some sort of talent management process and/or system in place in order to attract, develop, engage and retain talent. Few of these are however managing their talent at a strategic level. (Cheese *et al*, 2008). Organisations, as noted earlier, are focused on integrating talent practices, but these will not be effective if not directly linked to and supportive of the business strategy (Ready & Conger, 2007). "Business understanding of how people add value, how to invest in their development for best effect, and even how they work and what motivates them, remains surprisingly limited" (Cheese *et al,* 2008).

If talent and its components are practiced from a strategic perspective (linked to business strategy), and these practices are strong, there is evidence that it will lead to a high performance workplace which will drive bottom line results (Cheese *et al*, 2008; Creelman, 2004).

Given the above mentioned, it is concerning to note that in 2006, the Chartered Institute of Personnel and Development (CIPD) conducted research and found that 74% of their respondents did not have a well formulated plan for managing talent (CIPD, 2006). "There is no systematic and coordinated approach in the public and private sectors to developing and nurturing the next generation of business leaders, with judging talent… still very much an intuitive and "gut feeling" response" (SOCPO, cited in CIPD, 2006). The talent practices that are utilised will be reviewed next.

b) Talent Management Practices

Practices can be identified as those activities that are utilised to achieve operational objectives within a business. The Oxford dictionary defines practice as "a way of doing something that is the usual or expected way in a particular organisation or situation" (Oxford University Press, 2001). Essentially, an organisation will develop practices in order to enable it to meet its objectives.

Talent management practices are thus a way of working to achieve both long and short term organisational success. According to Morton (2005), the following eight categories of initiatives for talent management exist:

- Recruitment
- Retention
- Professional Development
- Leadership/ High Potential Development
- Performance Management
- Feedback/ Measurement
- Workforce Planning
- Culture

Foreman (2007) reflected on the essential functions of the talent lifecycle, these are depicted in figure 2-3 below. These functions are and should generally be embodied in the practices around talent in an organisation.

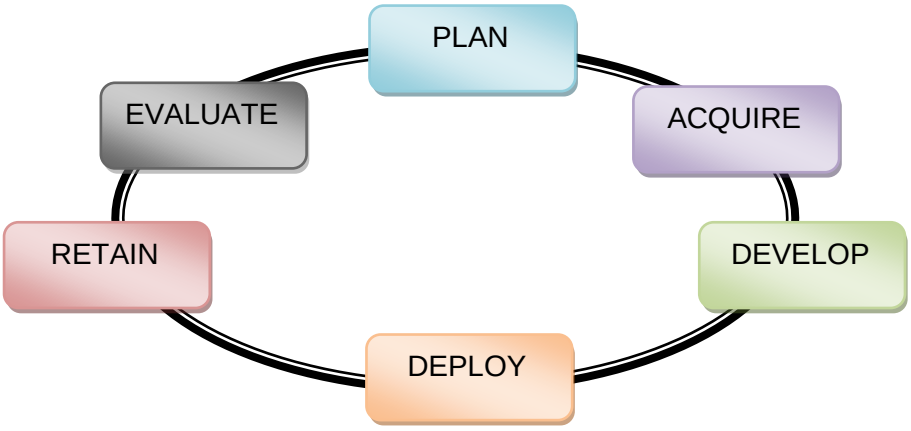

Figure 2-3: Talent Lifecycle (Foreman, 2007)

The specific practices of sourcing and recruiting, developing and retaining will be reviewed briefly. According to Gurthridge *et al* (2008), recruitment, development and retention systems and practices are still the key to a successful talent management strategy. The engagement of employees will however, be discussed in another section of this chapter. This section does not purport to be an in-depth analysis of practices but rather an understanding of practices to obtain insight into talent mindset. Practices can reflect whether there is actually a commitment to talent in terms of whether

resources are being allocated to these practices, for instance, an allocation of a substantial budget to recruitment indicates ownership and acknowledgement of importance (Lockwood, 2006). "Many current practices are [however] based on perception that talent is a cost, should be used up and expended over time" (Foreman, 2007). As noted earlier, practices can reflect the entrenchment of a mental model and mindset.

i. Sourcing Talent

Whereas sourcing practices were simplistic, there is an acknowledgement for the need for these to follow a more streamlined model. Many are proposing that talent sourcing techniques be aligned to the discipline of supply chain management (Cappelli, 2008; Cheese *et al*, 2008).

The methods through which organisations are able to source talent have also changed significantly with the introduction of the web which has enabled a multitude of advanced search mechanisms. These mechanisms have created connections between employers and potential candidates at a phenomenal rate (Frank *et al*, 2004). The downside of this has almost led to the process being less personalised which may have a negative effect, according to the researcher, on branding image and talent management on the part of the hiring organisation in the screening process. Frank *et al* (2004), notes that web telephone conferencing and video conferencing may increase the ability to conduct immediate interviews and to personalise the process from the onset. These mechanisms that are available do not however, eliminate the talent shortages that exist and result in the sourcing of specialists as well as leadership potential and capability to remain a challenge (CIPD, 2006).

These challenges do not even consider the fact that high performing organisations will not only look for talent with the relevant capabilities but also those that reinforce the culture, those that are compatible (HR Focus, 2007; Lockwood, 2006) – this adds to the complexity of the finding the best fit in the midst of skills shortages. Organisations will only seek employees who do not match the culture if they are attempting to change it (HR Focus, 2007).

Organisations that recruit for very technical positions are also exploring options such as open sourcing where there is open collaboration, online, amongst people to create complex software. Organisations are also reviewing the design of their "working processes and the jobs themselves" (Cheese *et al*, 2006), which, lends to options such as downskilling, nearshoring/ offshoring,

outsourcing/ partnering/ automation and restructuring. These options allow organisations to meet or reduce their demand for talent.

ii. Identifying and developing talent

Organisations have undertaken various methods to classify their critical talent and thus every organisations approach is generally different from the next. The core principles that most organisations have employed is to identify and develop the 'A players' – the top 15% who contribute to the strategic objectives of the organisation (Chambers *et al*, cited in Cheese *et al*, 2008). This was reinforced by Mckinsey's research which showed that high performers (A players), performed up to twice as high as their average counterparts. This also had a direct impact on profit. (Gurthridge *et al*, 2008).

It has, however, been proposed that this methodology is misleading – the focus should be on identifying those positions which have the highest strategic impact on the organisation and then matching those roles with talented individuals (Huselid *et al*, 2005 in Cheese *et al*, 2008). The "B players" should also still be recognised – these are the "knowledgeable, competent, steady performers who also have a big impact" (Gurthridge *et al*, 2008). Gurthridge and his colleagues (2008) also recognise that "creating an 'elite' can alienate the majority of the workforce, and have side effects such as removing work based social networks."

The most inclusive approach might be to focus not only on those who perform as 'A players' and those that have the potential capability to be leaders of the future, but also on the knowledge workers, the specialised technical experts and the professional staff (Cheese *et al*, 2008; Chartered Institute of Personnel and Development, 2006). "The 'unsung heroes' may include frontline staff, technical specialists, and even people who work for suppliers, contractors, and joint-venture partners" (Toten, 2008).

Once talent and key strategic positions are defined within an organisation, succession planning becomes critical for matching the identified talent and roles, and enabling development programs to support this. Importantly though the development of employees is a continuous process and it must be aligned to strategy.

In a 2006 study by the CIPD, they found that "94% of the respondents agreed that well-designed talent management development activities can have a positive impact on an organisation's bottom line and that developing high-potential individuals (67%) and growing future senior managers (63%) are the two main objectives for talent management activities" (CIPD, 2006). Indeed the development of employees will become critical, this is reflected in the fact that it has become known that employees will need to be trained now for jobs that do not even exist yet. The research by Deloitte Consulting (2006) found that 20% of the current workforce has the skills that will be required for approximately 60% of the future positions. Organisations have the capability, driven through technology, to conduct 'technology assisted learning, to entrench the organisation in a learning culture and to drive performance by creating short and targeted performance driven lessons (Frank *et al*, 2004).

The question remains as to why in most organisations this is not occurring; it comes back to the fact that these practices are handled as expenses as opposed to investments. Talent sourcing and career planning strategies are therefore often the first to be reduced or even stopped when focusing on the short-term. This may create a vicious circle- the shortage of talent blocks corporate growth, creating additional performance pressures that further divert managers' attention towards short-term issues" (Gurthridge *et al*, 2008). It can be assumed that many organisations that are focused on survival in the short-term with the advent of the recession have cut back on their employee development activities.

In Cheese and his colleagues' definition of a talent powered organisation it was noted that this type of organisation would train and develop all of its managers in talent management practices – to attract, retain, motivate, nurture and grow talent. "It rewards them when they achieve this, and sanctions them when they do not." (Cheese *et al*, 2008). This should aid organisations to engage and retain their talent effectively. These practices will be reviewed next.

iii. The quest for engagement

Although engagement was not cited as one of the practices in the model, it is nevertheless a key factor in firstly ensuring that talented individuals will spontaneously share their human capital and secondly to retain these individuals. Cheese *et al* (2008) asserts that "finding talent is not enough if it is not motivated or aligned to business objectives", yet the evidence suggests that many of our

workforces are less and less engaged." Engagement is defined physically, intellectually and emotively: 'I am here; my mind and my feelings are on the job and with the people around me' (Cheese *et al*, 2008).

Guest (2009) notes that engagement is a psychological state and that this has two implications that need to be considered by organisations, firstly, psychological states are not always stable and therefore can change. Secondly, there may be factors that can affect the psychological state positively and negatively (Guest, 2009). This draws attention back to the original discussion in the first section on tangible assets regarding people as the owners of capital who have the discretion to share their capital with the organisation or to withhold it. Engaged employees will be more likely to share their capital or knowledge on a regular basis but the organisation can affect their decision or level of willingness to engage with the organisation.

Engagement has also been identified by the following three characteristics that are demonstrated by employees and are highly visible (Cheese *et al*, 2008; Shirom, 2005)

- Vigour: Engaged employees are considered to be physically active as well as mentally resilient.
- Absorption: Engaged employees are engrossed in their work and do not have a focus on completing work based on time contracted but work spontaneously.
- Dedication: Work is considered to be meaningful and fulfilling for those who are engaged – it defines an important part of who they are.

"It means motivation, commitment, passion, desire, ambition, trust, empathy, solidarity, inspiration, selflessness. It is a quality that persuades people to align their own interests with their organisations" (Cheese *et al*, 2008).

The question was raised at the Talent Management Summit in July 2008 in Johannesburg around the issue of how many organisations have active engagement models in their organisations. Only approximately 12% of the audience (consisting of business professionals in HR) indicated that they do have active models (not withstanding that some may not have participated). The figure is, however, still shocking and could be considered as an indicator of the mindset of organisations towards their talent; they do not appear to embrace the importance of engaging talent in order to meet the strategic objectives. The sample is small (approximately 100 delegates) but it is of the researcher's opinion that this may be a theme across a number of organisations.

It has been proven that there is a distinct relationship between engagement and performance (Cheese *et al*, 2008; Creelman, 2004). In a review of the literature by Cheese *et al* (2008), the following findings were made:

- It has been shown that a 20% difference in performance outcomes exists between individuals who are engaged and average individual performance.
- A 0.7% increase was found in the operating margin of those organisations that held a 5% higher level of engagement in their workforce.
- A 50% increase in performance was found in organisations that had an engaged workforce compared to those that do not have this level of engagement.
- Sharp (2009), also reviewed the statistics on the return of engagement and found that:
- "84% of highly engaged employees believe they can positively impact the quality of their company's products, compared with 31% of the disengaged."
- "72% of the highly engaged believe they can positively affect customer service, versus 27% of the disengaged. "
- "68% of the highly engaged believe they can positively impact costs in their job or unit versus 19% of the disengaged".

As can be seen, it is of critical concern that organisations foster employee engagement to ensure sustainable and optimal performance. There are also some alarming statistics available from research around engagement levels. Guest (2009) detailed a recent report by the Corporate Leadership Council (2008). This report indicated that in the beginning of 2007, one in ten employees was extremely disengaged or performing poorly. In the latter part of 2008, the number changed to one in five employees.

Disengaged workers are seen as those who are despondent within the organisation, and resistant to change. Studies from Gallup in 2001 (cited in Cheese *et al*, 2008) showed that "no fewer than 24.7 million US workers -19 per cent – were actively disengaged". It also indicated that they take 3.5 days more away from work which equates to an additional 86.5 million days and a high loss in production. Another study found that "less than one-fifth of employees were highly engaged, one-fifth of the workforce were disengaged and about two-thirds were moderately engaged (Lockwood, 2006). As can be seen, engagement levels do vary across the studies but the findings are significant especially in considering the financial and business impact of the disengaged employees.

These are disconcerting when considering that the probability is high that these figures are increasing rapidly, especially with the increase in retrenchments based on economic pressures.

Lockwood (2006) cited that “employees who are most committed perform 20% better and are 87% less likely to resign. The role of the manager as the most important enabler of employee commitment to the job, organization and teams cannot be overemphasized”. The employees that are engaged are more likely to stay with the organisation in the long term - three times as likely to stay in the next year and also three times more likely to spend their entire career at the organisation (Cheese *et al*, 2008). It would be extremely beneficial if an organisation could utilise talent management to ensure that the truly talented individuals are highly engaged to meet the required strategic objectives. “The risk is that moderately engaged employees may move toward being disengaged” (Lockwood, 2006).

What drives engagement? An organisation has various factors or features that influence the degree to which employees are engaged or not (Guest, 2009). Drivers of engagement have also been differentiated for employees who are already highly engaged and for employees who are complacent. ISR (cited in Cheese *et al*, 2009) found that factors such as “leadership and management effectiveness, organizational values, and opportunities to grow and make meaningful contributions” were drivers for the highly engaged. Factors such as “supervisor effectiveness, organizational focus on customer needs, and opportunities for long-term employment” were more appropriate as drivers for the complacent.

The following list of factors have also been cited to affect engagement (Cheese *et al*, 2008)

- Trust and integrity,
- Nature of the job,
- Ability to align individual effort with company performance,
- Career growth opportunities,
- Pride in the company,
- Relationships with co-workers,
- Personal development,
- Relationship with immediate line manager”

What would the impact then be of an organisations talent mindset on the work environment of employees and these factors? The assumption based on research is that an employee's perception that the organisation does have a mindset that values its talent and sees it as critical for success, could lead to more engagement. Furthermore, if the list of factors is examined it is found that talent management practices are directly related to the factors, thus, it can be deduced that if an organisation has a talent mindset, there will be effective integrated talent practices and these practices will lead to engagement and ultimately business performance and profitability. In addition, an important consideration is that an organisation with a positive talent mindset should be interested in the individual and in engaging him/her to release "capital" to the organisation. This should increase the engagement and thus retention of the workforce.

This statement is supported, "when well done, practices that support talent management also support employee engagement" (Lockwood, 2006). Talent management (i.e. the way that employees are managed and developed and how they are allowed to interact), influences the degree to which employees are engaged (Cheese *et al,* 2008).

The investment of energy into work and ultimately engagement is only valuable if employees know how to direct their efforts to meet the organisation's strategy. It is thus critical that they are aligned to organisational goals and guided in their performance. If talented individuals are not mobilised in the organisation as they may expect to be, they will not necessarily be engaged to the degree that they should be (CIPD, 2006).

The following statements sum up the relationship between talent management, engagement, retention and profitability. "Effective talent management policies and practices that demonstrate commitment to human capital result in more engaged employees and lower turnover. Consequently, employee engagement has a substantial impact on employee productivity and talent retention. Employee engagement, in fact, can make or break the bottom line" (Lockwood, 2006).

iv. Retaining talent

As noted earlier in the introduction of this paper, employees tend to leave their manager and not necessarily the organisation. Employees will be retained in an organisation if they are able to cultivate a strong relationship with their manager and have rigorous conversations (Frank *et al*,

2004; Lockwood, 2006; HRI Institute, 2001). Other drivers of retention include the organisational culture, the degree to which the employees are engaged as well as leadership development (Lockwood, 2006). “Rewards and recognition have also been cited as key factors that can aid talent retention and improve business performance (Chartered Institute for Personnel and Development, 2006; Lockwood, 2006).

The advent of technology has resulted in easier access for employees to search for work if they feel disengaged or dissatisfied. It has however also led to providing options for employees to work from various locations and from home. This allows organisations to also create various options to retain their talent by creating flexible work arrangements (Cheese *et al*, 2008). Keeping women in the workplace who would normally exit the market when they have had children is easier with the capability to work from home as well as flexible working hours. It is thus crucial that a talent powered organisation is in fact created as an enabler of retention.

Frank *et al*’s research (2004) highlighted the trends of the future with regards to turnover and retention. Some of the trends to turnover were noted as follows:

- Organisations will report on retention in their annual reports and it will be viewed as one of the critical indices.
- Managers will be measured and rewarded on their retention rates for their sections in their managerial performance reviews.
- Training will be geared to build leadership capability in retaining employees.
- Employees will play a crucial role in the retention of their peers and be well rewarded for it.
- The business case for retention will become even more established based on improved measurement metrics.

When the issue of attempting to retain talent is neglected, the A Class players are generally lost first as they are highly employable to the market (Foreman, 2007). Currently, the state of organisations towards retaining their key employees is not optimal. In a survey conducted in 2006 by the CIPD, it was found that 68% of the respondents did not have talent retention plans (CIPD, 2006). This has been exacerbated by the current recession. In 2003, it was noted that the economy’s downsizing and retrenchments weakened employee loyalty (Frank *et al*, 2004). How much more true would this be now, given the recession and onslaught of retrenchments across the world, which has not reduced the need for critical positions but has hurt organisational culture?

v. Summary

Some organisations have developed the capability of building “talent factories” by integrating not only talent practices and technological functionality that support the strategy, but also have the emotional commitment of management to support these. This commitment is reflected in every day practices (Ready & Conger, 2007). It is this commitment that enables an organisation to manage its talent successfully.

“Talent management is best seen not as a set of topics, but as a perspective or a mindset. A talent management perspective presumes talented individuals play a central role in the success of the firm.” (Creelman, 2004).Talent management is the path to organisational excellence (Morton, 2004) and as such it requires a consideration of the assumptions and beliefs regarding talent which is at the heart of the organisation (Talent management review, 2008). Talent is no longer easily accessible and will require a focus not only on the practices of retaining and engaging talent but the core mindsets that drive the talent throughout the organisation.

The next section will focus on defining talent mindsets more clearly.

2.5.3 TALENT MINDSET

The Human Capital Institute, amongst others (Morton, 2008) refers to talent mindset as the enduring belief that talent is critical to an organisation’s competitive advantage, with benefits to both the individual and the organisation. Mindset in itself is defined as “a state of mind that affects an individual’s attitude to events and the ability to make decisions” (Prior, 2009). The Oxford dictionary defines mindset as “a set of attitudes or fixed ideas that somebody has and that are often difficult to change” (Oxford University Press, 2001). Mindset is formulated by a variety of factors including a person’s educational background, culture, societal systems, and personal upbringing, and may also be affected by corporate culture and past experiences (Prior, 2009).

Unfortunately many organisations are unclear as to how to measure their talent mindsets and the distinction between mindset and organisational talent management practices is not clear. In order to unpack this concept more clearly, one has to establish exactly what mindset refers to. Literature

which refers to talent mindset rarely defines the concept but does refer to the criticalness of establishing a talent mindset (Creelman, 2004; Deloitte Consulting, 2006).

Based upon the previously cited definitions, it can be surmised that mindset is a frame of reference and powerful mental attitude created by an individual through which reality is perceived and which therefore affects the decisions making process. It can be seen from these definitions that mindset would be a strong driver which will determine the manner in which an individual will interpret and respond to situations or his/ her environment. More specifically, it relates to the underlying mental models which inform and transform into hardened beliefs which can be seen as mindsets.

For the purpose of this study, Talent Mindset may be defined as an organisation's mental attitude or state of mind towards talent and the significance of talent in achieving a competitive advantage. If the mindset towards talent is that it is crucial to business success, one can assume that this mental attitude will result in the organisation investing a large amount of effort into building talent in the organisation and that there would be resulting practices which embody the mindset. It will furthermore, drive the ensuing behaviours of managers within the organisation towards talent. How does an organisation establish a talent mindset if there is no clear cut definition of what this mindset will entail, also, what mindset will lead to business success?

It is of the researcher's opinion that a talent mindset does not necessarily imply that it is a positive belief that talent will contribute to the obtainment of a competitive advantage but can be viewed on a continuum. The continuum will range from having a positive talent mindset (competitive) which regards talent as an essential, non-replaceable facet of an organisations ability to succeed and meet its strategic objectives to, having a negative talent mindset. An organisation that does not reflect a positive culture towards talent, does not necessarily mean that it is void of a talent mindset but rather that the current mindset is not beneficial to drive the business. A negative talent mindset (passive) will result in an organisation having an attitude that talent is replaceable and that it is essentially only a cost centre adding no long term value to gaining a competitive advantage.

In Chinastaff (2009) it is noted how two interviewers have different opinions about a candidate who arrives late and forgets documents. The candidate however interviews well, is confident, can answer all the questions and has a reputable track record. The one interviewer automatically allows a mental model that if you are late you are sluggish and lazy determine the decision. The other interviewer however further investigates the reasons for lateness and makes an informed decision

around this candidate as 'talent'. Is it possible that organisations that embody a positive talent mindset will encourage exploration of options beyond overarching mental models to attract, deploy, develop and retain talent?

If mindset is considered in the light that it can either be beneficial to the effective management of talent or be to the demise of talent (bi-dimensional), continuums of talent mindsets can be discussed either in terms of positive or negative mindsets or old or new mindsets which result in a significant difference in the way talent is managed. One article listed the changes in thinking about talent (Johnson, 2006) please refer to Table 2-3 below.

Table 2-2
Old and new ways of thinking (Johnson, 2006)

Old way of thinking about talent	**New ways of thinking about talent**
We hire diverse candidates	We develop diverse candidates which represent key talent linked to strategic roles
The employment deal is the employment deal – that is what it is like to work here	We are flexible and offer alternative working arrangements when it makes business sense
For proven employees, we will support alternative work arrangements upon request and approval	We promote alterative work arrangements as a way of engaging more segments of the workforce and we also benefit financially
When the retirement of a large segment of the workforce finally occurs, we will have no one to manage the business	There are many retirees who would like to functional roles where they can stay involved using their skills and may even mentor existing employees

As can be seen however, these changes in thinking do not reflect changes in the holistic view of talent but rather work arrangements and tactical processes.

The war for talent (Michaels, Handfield- Jones & Axelrod, 2001), discussed old mindsets and new mindsets regarding people which is more appropriate. These are reflected in Table 2-4 below.

Table 2- 3
Old and New Mindsets (Michaels, Handfield-Jones & Axelrod, 2001)

Old Mindset About People	New Talent Mindset
A vague notion that "people are our most important asset"	A deep conviction that better talent leads to better corporate performance
HR is responsible for people management	All managers are accountable for strengthening their talent pool
We have a two-day succession planning exercise once a year	Talent management is a central part of how we run the company
I work with the people I inherit	I take bold actions to build the talent pool I need

The question regarding this literature is whether this really represents mindset or only thoughts regarding talent at an operational level. For positive talent mindsets to be truly effective and add value to the organisation in such a manner that it represents a clear competitive advantage, it has to emanate from a strategic perspective and not tactical. As noted earlier, the main concern currently is that talent management is viewed as a short-term tactical problem (Gurthridge, *et al*, 2008). This mindset would have to be a holistic and integrated approach to leveraging the greatest advantage from people (Gurthridge, *et al*, 2008).

The challenge regarding talent mindsets is underpinned by the paradigms in which organisations function. Cappelli (2008) notes that organisations are still utilising the practices from the 1950's based on the fact that they have not come to the realisation that the only constant is uncertainty. Cheese *et al* (2008) supports this notion by stating that the only new constant is change. Organisations have to adapt to "new competitive pressures, new operating models for workforces and businesses and to new market opportunities" (Cheese *et al,* 2008).

The conclusion that can be drawn is that organisations are possibly not coming to terms with the impact of change and uncertainty on their businesses, and the required shift in mindsets. This would include a shift in the manner in which talent and meeting the strategic objectives of the organisation by utilising this talent is viewed and acted upon. "Great companies respond to technological change with thoughtfulness and creativity, driven by a compulsion to turn unrealized potential into results; mediocre companies react and lurch about, motivated by a fear of being left behind" (Collins, 2001). Perhaps this statement by Collins is true for any type of change and not just technological change.

If an organisation realises the impact of change as well as how important it is to manage its talent as a critical resource in a competitive market, it will be a step closer to having a competitive edge. Unfortunately, it does take more than this, it is essential to instil a deep commitment to talent throughout each level of the organisation (Gurthridge *et al*, 2008). An organisation can have updated best practices regarding talent, but without a deep-seated commitment from the leaders of the organisation, talent management fails (Ready & Conger, 2007).

Cheese *et al* (2008) reviewed the results of the study completed by Accenture in 2007, detailing the key factors required to achieve high performance rated by executives, and concluded that talent issues are in fact a top priority for executives. For some organisations, talent is seen as a burning issue which means that there is a "sense of urgency and focus which is the first critical part of having a corporate talent mindset" (Cheese *et al*, 2008). This was confirmed in a previous study by SHRM in 2006, where they found that 76% of the participating companies considered talent management a top priority (Lockwood, 2006).

Organisations have not always seen talent as a priority and this trend is not found across the board as shown in other studies. In some studies (conference board study and SHRM survey), there appeared to be small ratings in the list of top management concerns for talent identification and growth, engagements and diversity. (Tucker *et al,* 2006)

According to Creelman (2004), organisations do not understand the state of their talent or where to invest to obtain the most benefit from talent, but they do know that talent is critically important. This creates a situation where their strong belief as well as the practices of talent do not align thus no action can be taken to encapsulate and drive the mindset to create value for the organisation. The talent mindset would in fact continuously have to lead to the right questions being asked that create the understanding required to benefit from talent (Creelman, 2004). In fact long-term orientated organisations need to examine the manner in which to harness their talent more carefully and they will appreciate the contribution to the organisational strategy by all individuals (Lockwood, 2006).
Organisations need to view talent as an asset that can provide them with the strategic competitive edge driven through the business strategy. In order to achieve this they need "a pervasive talent mindset and culture driven by top leadership" (Cheese *et al*, 2008). This mindset would include a strong understanding of how talent is managed through the human capital process as well as how it is integrated with all the functions of the organisation (Cheese *et al*, 2008).

Some literature provides recommendations for how to develop a talent mindset. At a managerial level, it has been recommended that the workforce and especially immediate subordinates are viewed from the perspective of a 'Talent Manager'. Thus, the thought patterns that need to be embraced require managers to question if they have the capability to meet the strategy of the organisation, what type of talent is required to achieve business objectives and how to develop those talents to optimally meet these expectations (McCauley & Wakefield, 2006).

The Human Capital Institute (not dated) listed four points on how to instil a talent mindset. Firstly it would start with the top executive leadership such as the Managing Director and executive committee who would need to have a talent mindset and filter this down into the organisation. Secondly, this mindset would become ingrained in the organisation when every opportunity is utilised to plant the seed of the required talent mindset. Thirdly, the talent review processes would model the required behaviours and guide everyone to follow the correct practices that reflect the mindset and lastly, accountabilities will be assigned that are directly aligned to talent. This will entail that consequences exist for those that embrace the talent mindset – rewards, recognition (Human Capital Institute, not dated). This will ensure that talent is treated as crucial to the organisation's success on a daily basis and will reinforce the mindset across the business.

Ultimately, at the root of it all, "What is really needed is a deep seated conviction, among business unit heads and line leaders that people really matter- that leaders must develop the capabilities of employees, nurture their careers, and manage the performance of individuals and teams." (Gurthridge *et al*, 2008). It is this deep-seated conviction, the entrenched commitment and the passion for talent that accurately embodies a talent mindset - the mindset is that the people of the organisation who contribute to the attainment of strategic objectives are critical to the survival of the organisation and is the one intangible asset that can take an organisation to the next level.

An organisation with a talent mindset will support talent management to the level where the people with the capability to think forward and create inventive solutions to problems that do not even exist yet will be attracted to the organisation and be retained. People with the ability to perform strongly and consistently will also become a core workforce that can work like a well-oiled machine. The possibilities are endless; an organisation with the required positive talent mindset can develop the correct practices required in alignment with the needs of the business. "There is a need to change the mindset before the technical "solution" can work (Toten, 2008).

How does a positive talent mindset reflect itself in the organisation? According to Gurthridge *et al* (2008) “passion must start at the top and infuse the corporate culture; otherwise, talent management processes can easily deteriorate into bureaucratic routines”. Culture and mindset are closely related or as cited in the Human Capital Institute (2006) by Schein, “culture and mindsets are inextricably intertwined”. Culture will be explored in the next section. “We consistently see that top-performing companies instil the mind-set and culture needed to manage talent effectively” (own emphasis added) (Gurthridge *et al*, 2008).

2.5.4 TALENT CULTURE

This section will focus on defining what organisational culture is and how it links to talent mindsets.

As noted in the previous section, mental models are mechanisms in which previous behaviours, events are stored. It can be argued that they thus form the vehicle in which culture is embodied. Cultural learning is passed on through generations and provides a framework within which people interpret new information (Smith, not dated).

Organisational culture has been defined by consensus of the literature review to be the following:

- The beliefs, values, attitudes, understandings and meanings that employees share within an organisation (Hadburg cited in Cheese *et al*, 2008; Cooper, 2007; Oxford University Press, 2001)
- A pattern of shared assumptions created to adapt to and solve problems successfully and is thus entrenched to guide behaviours, judgements, perceptions and thinking of new and old members (Foreman, 2007; Hadburg cited in Cheese *et al*, 2008; Schein, 1985)

The relationship between paradigms, mental models, mindsets and culture was explored in the first section but not specifically relating to company culture. Company culture is often reflected upon as the ‘way we do things around here’ and according to Foreman (2007) this can have an enormously powerful effect on prescribing what is accepted as the practices of the organisation. This can be related back to the resistance experienced in change due to the strong reliance on the ‘status quo’ – ‘the way we have and always will do things around here’.

Hadburg (cited in Cheese *et al*, 2008) describes the effects of culture appropriately for the understanding of this research. “It affects the way people work together and how a decision gets made, and is reflected in policies and procedures. It is reinforced through the evolution of social networks as well as formal structures, and it manifests itself both tacitly, through assumptions and visibly, though artefacts and values”. In considering these facts, it also stands to reason that culture would be considerably hard to alter as it becomes stable, especially in groups that have had a long tenure within an organisation (Smith, not dated). Culture “represents the accumulated learning about how to think, feel and perceive the world that has contributed to the durability of the group” (Smith, not dated).

In light of this research, talent management has been described as a “mindset and a cultural issue” (Toten, 2008). Mindset and culture are viewed as constructs in the same stream that directly impact talent management success rates. It is important to note how a culture is initiated. It is believed that culture emanates when an organisation is formed, from the values and beliefs that the founder has (Schein, 1985). If we consider the view of Schein that “talent mindset and culture are inextricably intertwined” (cited in Human Capital Institute, not dated) then can it be argued that talent mindset also stems from the founder and that is reinforced by the sourcing of leaders that carry the same values and beliefs as the founder? Foreman (2007) argues that “culture goes beyond the leaders” and that “leadership helps to shape the company culture”. Leadership sets the stage for culture but the organisation as a whole carries the culture which becomes entrenched through the practices.

Considering these arguments, one can logically support the statement that, for a talent mindset to be ingrained in an organisation it must be “intrinsic to the culture” (Cheese *et al*, 2008). In terms of the relationship between culture and mindset, the researcher’s view is that the challenge would be to have an organisation embody a true talent mindset that understands talent to be the driver of an organisation’s competitive advantage and then would implement a culture reflecting such a mindset. Prior (2009) however, argued that mindset can be affected by culture but if organisational culture shapes behaviour, it will reinforce talent practices and become an enabler of a talent mindset. It is the classical question of the order of prioritization – did the chicken or the egg come first? The impact of mental models at an individual level is again bought to our attention. Are mental models created by individuals to support the already existing culture as opposed to a paradigm and then reinforced to become a mindset specific to that individual?

A view from Forman (2004) is that different cultural perspectives exist regarding talent. These cultural perspectives have been summarised in Table 2-5 below. These cultural perspectives are more in alignment with the holistic overview regarding talent and represent a basis from which a talent mindset could originate.

Table 2-4
Different Cultural Perspectives (Foreman, 2005)

Supportive Cultural Perspectives	**Restrictive Cultural Perspectives**
Talent is an asset	Talent is a cost
Talent needs continuing development	Talent needs to be used
Talent needs to be mentored and guided	Talent should be self sufficient
Knowledge should be shared	Knowledge is power and should be kept in a silo
Develop relationships and networks	Keep focused on your own work
Mistakes can lead to improvements	Don't admit failures
Ask questions	Don't rock the boat

A culture geared towards talent deeply affects the organisations performance. "The performance of an organisation and its culture, or climate is linked – if the climate internally [culture] does not support the strategic objectives of the organisation, they will not be realised" (Ready & Conger, 2007). Importantly, this climate (culture) is determined by the talent vestiges within the organisation and affects employee value propositions for the attraction of talent, employee engagement as well as retention (Gurthridge *et al*, 2008; Lockwood, 2006).

Culture has a strong impact on influencing the practices that an organisation will accept (Foreman, 2007). Can it be deduced then that if certain practices are strongly embedded in the organisation, that the culture then supports these, and if culture and mindset are closely related, then potentially there would be a mindset that supports the philosophy behind the accepted practices? This notion would then support the current talent mindset index's approach where certain questions around practices are utilised to probe talent mindset.

Morton, Ashton and Bellis (2005) postulated that there are several characteristics of a talent management culture namely:

- The active participation of the CEO,
- Shared meanings in the organisation regarding potential and performance
- Communication which is open and occurs across levels with ease

- Feedback loops between the different organisational hierarchies
- Emphasis placed on development and learning- a learning organisation
- Guiding principles/ "talent ethos"

(Morton, Ashton & Bellis, 2005)

To an extent Morton and Foreman's views are supportive of one another. It is perhaps appropriate at this stage to discuss the issue of the potential uni-dimensionality of talent mindset. Hofstede's definition and framework of national cultures can provide insight. Hofstede's expertise in defining culture was based on national cultures in terms of power distance, individualism, masculinity, uncertainty avoidance, and long term orientation (Itim International, 2009). In his view, culture is viewed as a bi-dimensional construct in each of these national sub-cultural classifications. Each cultural definition has a continuum and a country can either be high or low in individualism. Unfortunately no further research was found to support the notion that talent mindset is or is not bi-dimensional. As noted previously, it is the researcher's view that talent mindset is definitely not uni-dimensional based on the fact that positive and negative thought patterns, beliefs and perceptions can exist and to such a degree logic prevails that organisations can have a culture that either supports talent or does not. It can either have a positive or a negative mindset...

This can only possibly be changed by confronting new organisational members with knowledge that is stronger than the status quo, reinforcing mental models in favour of talent, filtering through the organisation with a simultaneous confrontation of existing members with the new knowledge to become a talent culture.

The next section will explore literature regarding the custodians of talent.

2.5.5 TALENT CUSTODIANS

A key issue that has been addressed extensively in literature is the custodianship/ ownership of talent within the organisation. There appears to be broad consensus that the human resources function is the enabler and supporter of talent management, whereas line management and senior executives are the drivers. The direct quotations of this view are listed below.

- "The role of HR is not 'talent management' but to foster that mindset and support managers by providing frameworks and tools for making good decisions." (Creelman, 2004).

- "HR staff are or should be the principal enablers of creating and sustaining the distinctive competencies of a talent-powered organization" (Cheese *et al*, 2008).

HR have been criticized for not supporting the whole organisation but rather just the senior or top level of the organisation and as a result do not understand where talent can be found in the organisation (Toten, 2008). There appears to be a general lack of trust in the judgement of HR in terms of talent management. "Certainly talent management won't be a success if it's seen purely as an HR initiative "(CIPD, 2005). Yet, HR is in fact expected to:

- Create the necessary tools and practices that enable the management of talent (Creelman, 2004),
- Manage the organisational culture to foster effective talent management (Lockwood, 2006)
- Play the role of change management agent in talent management activities (Lockwood, 2006)
- Mitigate risks around talent management around recruitment, development, deployment and talent portfolios (Lockwood, 2006),

Ashton and Morton (2005) state that "managers own the talent and are responsible to develop it", this will however occur in conjunction with HR who can facilitate the processes and provide the relevant frameworks. "HR leaders work closely with senior management to attract, hire, develop and retain talent" (Lockwood, 2006).

More importantly, for this study, it has been acknowledged that "HR is the facilitator of the talent mindset" (Lockwood, 2006). Talent mindset is not just a concept that is driven by Human Resources, but rather is entrenched in the whole organisation. "All levels of management must be onboard with the importance of talent management strategies" (Lockwood, 2006). HR and top leadership are essential in driving talent, but the mindset towards talent which drives competitive advantage must be held by the entire organisation (Cheese *et al*, 2008). More specifically, it is noted that HR may be the source of many of the processes, but talent management requires the "engagement of the whole organisation and the notion of the talent mindset" (Cheese *et al*, 2008).

In reviewing all the arguments, it is essential to highlight the emphasis on managing cultures and mindsets. HR in this context appears to be expected to play a facilitative guiding role in steering the correct mindset towards talent. HR is furthermore required to be a change agent, where organisational cultures, which are in direct conflict with organisational objectives and environmental pressures, must be altered. Smith (not dated) explains how the intervention of changing

organisational culture is not an easy task as it essentially means that the group is expected to forgo past successes and those things that 'worked' to drive or sustain them. "We are potentially invalidating the hard gained knowledge of any group we seek to breathe new life into, and the uncertainty engendered in such a leap from established 'truth' to a future yet to be established is certain to scare people" (Smith, not dated).

In order for HR to successfully facilitate a talent mindset in an organisation, it is thus proposed that the mental models held which do not support talent are challenged through 'diversity in thought' (Smith, not dated). HR thus has to facilitate the opportunities for organisational members to be exposed to thinking processes around talent that will support business strategy and to create frameworks which support the desired thinking. Pfeffer (cited in Losey, 2005) is cited to observe that HR's most important mandate is to change an organisation's mental models which underlie organisational cultures.

2.5.6 SUMMARY OF CONCEPTUALISATIONS

Where would practices link to the culture and mindset of an organisation? There is currently no research which provides a framework through which to explore how to measure and develop the optimal talent mindset and this is thus a crucial outcome to research regarding talent mindset. For instance, literature available from the Human Capital Institute states that "strong talent practices would result in high performance workplaces, which in turn will become part of an organisations culture" (The Human Capital Institute, not dated). Once again, how would talent practices link to the most optimal talent mindset?

Mckinsey's "work emphasised 'practices' as change levers" (cited in The Human Capital Institute, 2006), however, practices essentially are the way in which work is carried out and thus cannot change the fundamental beliefs that people hold regarding talent. Practices should, however, have the ability to reinforce talent mindsets throughout an organisation and ultimately, over time, result in a culture reflecting a talent mindset.

In summary, it is clear that Cheese *et al* (2008) was correct in saying that "your organization's leaders must create the right mindset and culture to multiply talent in every part of your organization, together with a new approach and a new model to sustain it".

2.6. THE TALENT WAR – INFLUENCING PERSPECTIVES / CONDITIONS

"The increasing fluidity of global labour markets, shifting workforce demographics, and changes in the nature of work itself make it more difficult to attract, engage and retain the critical talent that creates value for organisations". (Cheese *et al*, 2008)

The acknowledgement of the impending shortage of talent was first broadly acknowledged after Mckinsey's consultants completed a study which redflagged the "war for talent" in 1998. Their study revealed that if organisations wanted to compete effectively in the market they would need to also compete on a global scale to have the best talent (CIPD, 2006; Toten, 2008). The research also revealed that organisations would earn higher shareholder returns than their competitors (cited in the Human Capital Institute, 2006).

In this regard, talent management is viewed as a critical source of competitive advantage for organisations (Cheese *et al*, 2008). This section will thus focus on further investigating the factors that influence the talent shortages. These include, but are not limited to, demographical changes, skills shortages, generational challenges, global impact and lastly the specific pressures in South Africa which all lead to the 'talent squeeze' that organisations are currently experiencing.

2.6.1. SKILLS AVAILABILITY

According to Freeman (cited in Cheese *et al*, 2008), approximately 960 million people were available in the working population globally in the 1980s. In 2000 it was surveyed that this number had dropped to only 290 million. In addition to this decrease in numbers, there is a critical shortage of skills. These factors accumulate into the well documented 'talent war'.

'Organisation for Economic Cooperation and Development' (OECD) countries will experience a combined reduction of 65 million of the working population and surprisingly in the US there will be a shortage of approximately 10 million workers to fill the newly created jobs (Tucker *et al, 2*006). "As the workforce becomes more youthful and consequently less skilled, the demand for skilled labour will rise" (Tucker *et al*, 2006).

Unfortunately, skilled labour is not being developed by the educational systems. The number of students who matriculate lack the basic literacy and numeracy, communication ability, decision making as well as leadership skills. This has also been noted in the more developed nations such as Britain US companies have also been surveyed by the Corporate Executive Board and the average quality of candidates was criticized for having declined approximately 10 % since 2004 (Cheese *et al,* 2008).

Casner-Lotto and Barrington (cited in Cheese *et al*, 2008) have investigated the skills that enable new entrants to use the basic knowledge that they require from school in the workplace. “In written communications, the survey found 81 per cent of high-school graduates, 47 per cent of two-year college graduates and 28 per cent of four-year college graduates to be deficient. In leadership, they found deficiencies ranging from 24 per cent to 73 per cent. In professionalism/ work ethic, the deficiency ranged from 19 per cent to 70 per cent”. “Mckinsey reported that as many as 75000 managers who can work in global environments will be needed over the next 10-15 years – today there are as few as 5000” (cited in Cheese *et al,* 2008). This is a concern based on the findings regarding the deficiency in leadership competencies.

“In the United States, there will be demand for more than 30 million new college-educated workers in the next 10 years while only 23 million new U.S. college graduates are expected. In the European Union, younger workers are achieving high levels of education, yet demand for educated workers is still not being met.” (Tucker *et al*, 2006).

According to Schassler (cited in Bussin, 2009), “South Africa has 1.2% of the global workforce but 5.3% of the world’s unemployed.” What can be surmised again is that we do not have the appropriate skills sets to fill the positions that do in fact exist in South Africa and the world.

These facts support the notion that “industrial-era educational models may not provide the skills needed to succeed in today’s job market” (Deloitte Consulting, 2006). What is more concerning is that knowledge workers are increasingly being required to work in an environment where there are intensive technological advancements. They are required to rapidly acquire new higher skill sets and will thus need to have a higher level of cognitive capability (Cheese *et al*, 2008; Tucker *et al*, 2006). In fact it has already been shown that “today, 85% of jobs require education beyond high school, compared to 61% in 1991” (Deloitte Consulting, 2006).

Some organisations are reviewing the potential to source skills from the large pool of labour available in India and China (one billion of the global working population). However, less than 10 percent of these skills are capable of completing a whole unit of work (Cheese *et al*, 2008). The researcher notes how this is similar to the situation in South Africa where there is a large proportion of workers with limited skills that complete only a simple task as opposed to a complete work output. For instance, in the mining sector South Africa has a large labour complement due to jobs that have been designed around available skill sets as opposed to Australia where a number of the South African positions are grouped into one role.

In South Africa, the scarce skills that are available are increasingly mobile and the brain drain in South Africa is a consequence of this mobility. South Africa has been losing its core skills for a number of years and it is a well-known fact that a large proportion of these skills have moved to Australia. Australia has been identified as “one of the world’s greediest nations for skilled workers from abroad” and their policies support this successfully (Cheese *et al*, 2008). The number of skilled immigrants has increased by 33% in the last eight years based on this policy, that is, their skilled labour has increased by approximately eight million (Cheese *et al*, 2008).

The US has also been noted for its strong drive in the global talent market. They seek skills in science and engineering and are facing a mass of retirements. “NASA projected that 2 million Science and Engineering (S&E) workers would retire between 1998 and 2008 – yet only 198,000 students would graduate to fill vacancies” (Deloitte Consulting, 2006). According to Lockwood (2006), the US only has approximately 63000 graduates in these fields as opposed to China (350000 graduates) and India (120000).

This brief overview provides an indicator of how few skills are available to fill the positions that are being created in old and new markets. The onus will increasingly be on organisations to develop skills for the benefit of the industry as it has been predicted that “the competition for talent will remain intense until approximately 2016 as worker migration continues” (Tucker *et al*, 2006).

2.6.2. DEMOGRAPHIC SHIFTS

As noted earlier in this paper, Cooper (2007) states that in many ‘OECD countries, falling birth rates, historically low levels of unemployment and changing attitudes to work are combining to cause a “talent squeeze” in the labour market.

The shift in demographics has largely been driven by the fact that the experienced workers, the baby boomers in particular, are fast approaching their retirement (Cheese *et al*, 2008; CIPD, 2006; Frank *et al*, 2004; HR Focus, 2007). "A baby boomer turns 60 every 10 minutes in the United States." (HR Focus, 2007) and in addition Brook notes that there are not enough workers in the next generation to fill the vacancies left behind by these workers (cited in Frank *et al*, 2004). In fact it has been predicted that by 2016 there will be a shortage of approximately three million workers in the United States (HR Focus, 2007).

This is alarming based on further research that shows that the "rate of increase of population size in the USA has decreased from thirteen percent to just five percent in less than 15 years (CIPD, 2006). One indicator of the intensity of this situation is the current unemployment rate (1.7% for college graduates) which is exceptionally low compared with other countries (HR Focus, 2007).

It could be argued that this intensive shortage of talent due to retirements could be levelled out by the incoming flux of the younger working generations. However, studies by the European Commission (cited in Cheese *et al*, 2008) show that in 2009 "the youngest cohort of the EU working-age population (15-24) will drop below the size of the oldest cohort for the first time". Furthermore, the working population of the European Union is predicted to reduce by approximately 10% (from 307 million in 2004, to 255 million) by 2050 (cited in Cheese *et al*, 2008).

Fertility rates are still dropping and it has been noted that the rate of population growth in developed countries is now five times lower than in less developed countries (Cheese *et al*, 2008). The CIPD (2006) research shows that birth rates are being incentivised through monetary rewards by the Russian government to attempt to counter the declining population numbers.

The trends of the rest of the world outside of Africa still impact South Africa's own performance in the talent arena as our own skills are attracted to work in dollars and euro's in less crime ridden countries. South Africa and other developing nations are considered prime areas where talent can be hunted for by global counterparts. The CIPD (2006) notes how the USA and Russia are likely to experience problems to attract talent out of their own markets and therefore will increasingly be hunting for talent in the rest of the world. Developing or undeveloped nations do not have a problem with population growth, in fact the demographic profile is inverted with large streams of younger workers entering the workforce (Bramely, 2009). As noted in the previous section, these

younger workers generally lack the skills. In addition organisations face another challenge and that is how to manage generational differences in the workforce. This will be discussed next.

2.6.3. GENERATIONAL CHALLENGES

Discussions around generational challenges faced by organisations have erupted specifically around the issues of leadership and retention. This was demonstrated in the recent Talent Management Summit in July 2009 where most of the topics either touched on or even wholly focussed on the generational issue. The skills of attracting, recruiting and retaining talent have become complicated with the vastly different expectations of Generation X and Y employees. These employees have significantly different value drivers from the previous generations and therefore demand much more from the working world. A brief overview of the different generations and their expectations will be provided.

The baby boomers were born between the 1940's and 1950's and were seen as the reactive generation after the economic depression. This generation changed the way work was done compared with the previous generations and they worked hard to accumulate their wealth (Cheese *et al,* 2008). Bramely (2009) mentioned that the boomers have acquired depth of experience in terms of working up the corporate ladder.

Generation X followed and was born between 1960 and the 1970's. This generation experienced social change and are viewed as more cynical (Cheese *et al,* 2008) but are relatively stable in the workplace. This however does not always mean that they are content. The children from this generation have been referred to as the latch-key kids because their parents (baby boomers) worked long hours and left the children with keys to get into their homes (Raines, 2002). The result was also that this generation was seen as problematic, "defined by saying 'whatever', having a love for grunge and heavy metal as well as for being cynical against the previous generation. The emphasis was on the degeneracy of this group (Sloane, 2009).
According to Don Tapscott (cited in Cheese *et al*, 2008) this generation has norms of freedom, critical thinking, ability to share their knowledge and experiences, integrity, ability to communicate rapidly and receive information, and innovation based on the ability to challenge the status quo.

Generation Y was born from the beginning of the 1980's and 1990's and is the largest generational group to have emerged during the 2000s (Cheese *et al*, 2008; Sharp, 2009). This generation has a strong sense that they are able to accomplish anything based on the focus of their parents on uplifting their self-esteems and providing them with security (Cheese *et al*, 2008). "...They've always felt sought after, needed, indispensable..." (Raines, 2002). They also experience limited or no social anxiety (Sharp, 2009). According to Raines (2002) "they're the hottest commodity on the job market... they're sociable, optimistic, talented, well-educated, collaborative, open-minded, influential, and achievement-orientated."

According to HR Focus (2007), generations X and Y need recognition and want to feel as if they have ownership in their work. In fact, "Generation Y, are perceived to favour self-employment as it gives them greater freedom and the power to shape their own jobs." (Cheese *et al*, 2008).The expectations, particularly those of the Y generation appear to be unrealistic in the corporate world (Codrington, 2009). A survey conducted by DECODE reflected that 64% of this generation wanted to be promoted within a year and half of being employed (Codrington, 2009). "HR professionals say that these workers demand more flexibility, meaningful jobs, professional freedom, higher rewards, and a better work life balance than older employees do."(Gurthridge *et al*, 2008) Additionally, it has been noted that they expect strong leadership, development and networking opportunities (Raines, 2002).

This generation displays a distinct lack of loyalty to an organisation from this generation, especially when their needs are not being met (Bramely, 2009). They tend to regard their working lives as a series of different short-term (2-3 years) stages and high commitment to a particular career or employer is much less likely "(Gurthridge *et al,* 2008)

This results in a fundamental change in the way organisations propose to manage talent within this generation of workers. As can be seen, these employees have different expectations from the world of work (Raines, 2002). This net generation has indeed been perceived to be a lot more difficult to manage than other generations and are seen as lazy, demanding, unrealistic and uncommitted (Codrington,2009; Gurthridge *et al,* 2008).
On a positive note, they are able to adapt extensively to technology and are tolerant of different cultures (Sharp, 2009). This generation also has a strong desire to share knowledge but do not need any financial reward to do so (Cheese *et al*, 2008). "Younger people, in particular, will look at career as part of their portfolio of interests, desires and aspirations in their lives" (Cheese *et al*,

2008). This generation expects an organisation to provide a place of work where they can learn, be challenged, have fun and importantly be rewarded (Raines, 2002).

The face of the working world is rapidly changing “twenty years ago, most people could expect to experience a maximum of two different jobs by the age of 25. In 2006, the figure is four jobs” (CIPD, 2006). This new face is impacting the manner in which organisations have to design their initiatives to manage their talent which now have to reflect the working values and attitudes of the newer generations. (CIPD, 2006) Cheese *et al* (2008), mentions that the workforce has attitudinal differences based on generational values, which extenuates the difficulty to engage workers. This will require a strong drive towards exploring new ways of working to meet the demands for attracting, engaging and retaining the talented generation Y’s in the market (CIPD, 2006).

Cheese *et al’s* (2008) comment summarises this section appropriately - “Understanding the generational differences is crucial to understanding engagement and motivational issues, career direction and aspirations, leadership role models and expectations, and work styles”.

The next section will focus on the impact of turnover on the organisation.

2.6.4. TURNOVER CHALLENGES

Research indicates that 15% or more of turnover in an organisation will weaken the capabilities within the business when it is unwanted (Foreman, 2007). An organisation loses valuable knowledge and financial capital as a result of turnover.

Turnover of talented individuals has extensive effects on the organisation, these include loss of know-how, customer relationships, developmental investments, as well as the potential loss of other talent based on internal relationships amongst other things (Dresang in Frank *et al,* 2004). “With turnover and retirements come knowledge and skills losses”. IDC research terms this trend a “silent killer” and estimates that between 10% and 30% of capability can be lost each year because of it.” (HR Focus, 2007).

Organisations can also lose millions from turnover if it is not managed effectively. This cost will include the replacement of that employee, training of a new employee as well as a loss in

productivity. It has been estimated by the IDC that turnover can cost as much as 200 – 250% of a Manager's annual total cost to company (cited in HR Focus, 2007). Foreman (2007) notes how the replacement of one talented employee can cost the organisation at least the minimum compensation of that person – more than likely the annual package. "The much-reported statistic of turnover costing 150% of a departing employee's annual compensation is just the tip of the iceberg" (HR Focus, 2007). Dreseng (cited in Frank *et al*, 2004), explains how turnover has an impact on overall profitability. "The annual cost of turnover in the supermarket industry exceeds the entire industry's annual profit by more than 40 percent" (Frank, 2000, in Frank *et al*, 2004).

Turnover rates are bound to increase as the economy improves (Frank *et al*, 2004); employees have been holding onto their jobs for the security but are likely to leave when further opportunities become available. Frank *et al* (2004) observes how this was the case in 2003, where most workers (80%) were willing to resign from their organisations when the economy improved (Conference Board, 2003 & SHRM, 2003; in Frank *et al*, 2004). Loyalty is generally towards professional skills (Lockwood, 2006) or excellent managerial-employee relationships as opposed to organisations. It is acknowledged that web enabled technology does aggravate turnover by providing employees with the tools and accessibility of searching for new employment at the click of a button. (Frank *et al*, 2004).

Turnover is not completely undesirable though, this is based on the fact that organisations require a certain degree of turnover to maintain energy and freshness of ideas and skill sets. According to HR Focus (2007), a turnover rate of 10-12% at the management level is desirable.

Effective talent management underpinned by the correct mindset could mitigate excessive turnover rates. The specific contextual factors related to the South African market will be briefly explored next.

2.6.5. SOUTH AFRICAN MARKET

A number of specific issues surrounding the South African market have already been addressed such as the fact that organisations are still challenged with intense skills shortages based on the global demand for talent from retirements. This is the case even though South Africa's age curves are inverted and we have a large proportion of younger workers entering the workforce. South

Africa also has an intense lack of white collar skills. Most of the labourers are still in rural areas and work in primary sectors completing simple tasks as opposed to complete roles.

In addition to these previously discussed challenges, South Africa also has a deeply empowered labour law system which also gives rise to a strongly unionised environment. This poses a challenge, in that the management of what an organisation defines as 'talent' becomes tainted with legal obligations which may or may not lead to supporting the strategy.

One of these obligations is the requirement to implement affirmative action initiatives as required by the Employment Equity Act No. 55 of 1998. In the midst of continuing concerns to balance the workplace in terms of affirmative action initiatives and diversity (Frank *et al*, 2004), organisation's still need to ensure that they have highly skilled talent operating and driving business to the next level. In certain sectors, the skills simply are not available to meet the demand. Organisations should carry the onus to develop talent in the market but individuals cannot be expected to function optimally based upon a fast-tracking programme alone. The unionised environment continues to place pressure on organisations to recruit without regard to the ability of the individual to optimally meet the demands of the organisation.

In addition to this, the political arena as well as the high crime rate has played a prominent role in the immigration of talent and this has also increased the pressure on South African organisations. The effect of this brain drain has mainly been felt in the medical sector as well as the high end fields of engineering, science (Deloitte Consulting, 2006), actuarial practices and predominantly in the mining industry as a whole. South Africa will have to join in the global war for talent as the critical talent pools are depleted (Deloitte Consulting, 2006).

South African organisations will have to invest more time and energy into talent management if they are to ensure that they retain their current talent and are able to attract or develop future sources of talent. This will require a strong alteration to the current mindset towards talent.

The next section will review how organisations have reacted to the 'talent squeeze' and the impact of talent management on business effectiveness.

2.6.6. TALENT MANAGEMENT: IMPACT ON BUSINESS EFFECTIVENESS

Based on the above mentioned factors that are driving shortages in talent and skills, it has been shown that "talent management has become a top priority for organisations in the last decade" (Cited in Ashton & Morton, 2005; Cheese *et al,* 2008; Lockwood, 2006). Seventy five percent of the top corporate offices were concerned about the talent shortages in the study conducted by Mckinsey (Cited in Ashton & Morton, 2005). The Aberdeen Group revealed in December 2008, that the top business priorities for organisations in 2009 was firstly to execute business strategy, secondly to reduce operational costs, thirdly to recruit, retain and develop a great workforce and, lastly, to adapt to change quickly and competently (Cillie-Schmidt, 2009).

The new cycles of business growth which are occurring in the market will require new skill sets if organisations are to remain successful. There is also a rapid emergence of new markets which are resulting in an increased demand for talent from the larger organisations. (Cheese *et al*, 2008). Knowledge and technology is becoming the 'new economic currency' (Tucker *et al*, 2006). This will require effective talent management from organisations to ensure that both knowledge and technology can be harvested to result in a return on investment. Lockwood (2006) emphasised that "an integrated approach to talent management offers a pathway toward sustaining outstanding business results" As mentioned earlier research has indicated that those organisations that successfully manage their talent, on average, have a 22% greater shareholder return (Workinfo, 2008).

It can be assumed that organisations with a strong talent mindset will ultimately have strong talent practices. A number of business value metrics can be utilised to measure integrated talent management specifically, employee engagement, quality of hire, % of ready now employees, diversity in leadership, increased accountability and depth of bench (Jones, 2007). "Talent management metrics link human capital investment to financial performance" (Lockwood, 2006).

Employee engagement or specifically engaging behaviours was cited to involve the channelling of personal energies into physical, cognitive and emotional labours. This is related to vigour and thus wellbeing of the employees and their respective organisations. Talent management, vigour and employee well being, which is assumed to impact engagement, has a clear impact on business effectiveness (source).

"Global competition for jobs, workers' growing responsibility for their own careers, and expanding life choices are creating a workforce that is highly stressed. Organizations will take steps to minimize the stress by putting workers in charge of arranging workdays and workweeks according to both work and personal demands" (Tucker *et al*, 2006). This is interesting considering the earlier point of well-being as well as the requirements of the new generation.

In 2004, a high performance workforce study was conducted where it was revealed that in order to dramatically improve people performance and thus business performance, the practice of talent management was number one on the list (Lockwood, 2006). If organisations wish to survive not only the recession but also the operational and strategic challenges, they need to become the best at managing their talent (Chartered Institute for Personnel and Development, 2006).

From the above mentioned, it is clear that there is a strong business case to support effective talent management practices. If talent management practices and their success are however dependent on the underlying talent mindset of the organisation, then it is critically important to understand how to measure mindsets.

2.7. LEADERSHIP INFLUENCES

A new mindset towards talent is required in the workplace – "inspired by new leadership, informed by new strategy, supported by new capabilities". (Cheese *et al*, 2008).

The leadership of the organisation sets the strategic direction of the business and establishes the relevant goals and objectives that the people need to achieve in this regard (Foreman, 2007). Leaders are required to not only understand the impact of talent on the organisation but to truly believe in the value that exceptional talent can add to achieving objectives. According to Foreman (2007), it is not enough to promise something because it is politically correct and not to follow through with it. It can thus be concluded that this then would reflect that the deep seated mindset is in fact not there, and that the demonstrated approval of best practices to aid and govern the management of talent will be indicative that there is a mindset that understands and fosters the value of talent.

"Leaders need to identify and invest in the critical talent that provides a platform for success, growth and new opportunities, but they must do so in a world of constraints – on time, money, and especially talent" (Cheese *et al*, 2008). It is believed that too often leaders think that business sense and talent management operate against each other. This is reflected through the actions of continuing cost cutting strategies where people are often the first place of impact in order to ensure that annual financial targets are achieved. (Foreman, 2007). Leadership however, need to realise that an investment in talent will build sustainable long term growth (Foreman, 2007).

Gurthridge *et al* (2008) reviewed a study conducted by McKinsey where the seven obstacles to good talent management were extracted. Out of all seven issues, two were directly related to leadership specifically and four were related to line management which can also be effectively seen as the leaders of an organisation. (Gurthridge *et al*, 2008). More specifically, the number one issue was that senior managers do not spend high quality time on talent management.

Organisations are now focusing on how to make the leaders accountable for employee retention and development. It has even been predicted that organisations may select leadership largely on their ability to retain talent (Frank *et al*, 2004). Another initiative of organisations is to invest strongly in developing their leaders to create the competitive edge (Deloitte Consulting, 2006). "Leadership development has become a much more strategic process, and faulty processes and executive inattention now carry a tangible cost" (Ready & Conger, 2007).

It is important to consider the extensive impact that leadership has on talent mindsets, from the literature it is clear that mindsets originate with the leadership of the organisation and then is further cascaded into the organisation through demonstrated support for talent management and its associated practices.

The next chapter will address the methodological considerations of this study.

CHAPTER THREE: METHOD OF INVESTIGATION

3.1. INTRODUCTION

The previous chapter outlined the literature related to talent mindsets in order to attempt to define a theoretical framework for the construct. The literature indicated that talent mindset is broadly a mental model regarding talent which may or may not be held throughout the organisation. The talent mindset index has been designed to measure the construct. However, an evaluation of its psychometric properties is still required before the instrument can be utilised in the market.

This chapter will focus exclusively on detailing the methodological 'recipe' otherwise known as the research design that was utilised for this study. The aim will thus be to establish the research approach, the sample, the research design, the data collection procedure, and the data analysis techniques and procedures.

3.2. THE RESEARCH DESIGN

Research design can be described as the glue that holds a research project together; it provides the structure for conducting the research (Trochim, 2006).

This study is based on a quantitative-descriptive (survey) design. A survey was utilised to collect the data and was distributed for manual/ online completion to obtain the required responses. Participants were either informed via the executive brief of survey's url address or were requested to complete the printed survey on a voluntary basis.

It has been indicated that surveys are appropriate for measuring attitudes and orientations (Coldwell & Herbst, 2004). The benefit of creating questionnaires for self-administration is that there is a definite level of standardisation in the study with minimal interference from the researcher which could result in bias (O'Neil, 2004). This type of design is suitable to determine the true perception of the talent mindset of the organisation in order to validate the survey. Two distinct disadvantages of utilising a questionnaire is firstly the low anticipated response rate and secondly, the fact that not all respondents will necessarily interpret the questions correctly.

This design will only be utilised to assess the psychometric properties of this instrument at a single point in time (cross sectional design).

The sample consists of the white collar working level based on the target population of managerial staff as well as the staff working within the human resources discipline. The sample is defined upon two distinct requirements. Firstly, it is essential that the respondents understand the questions within the survey in order to answer validly. Secondly, based upon the literature review, it has been found that human resources enabled a talent mindset in an organisation whilst managers would drive the mindset. These sample groups thus represented the main groups which were targeted when utilising the questionnaire.

The research design that is utilised for this study is a non-experimental research design. This design was utilised to investigate the psychometric properties of the survey and specifically to attempt to detect if any underlying dimensions exist in the questionnaire which could contribute to the construct validity thereof. This was achieved through the quantitative analysis of the data and the interpretation of the outcomes of that analysis.

The study employed the following statistical methods in the study:

- Descriptive statistical analysis and item analysis
- Exploratory factor analysis to establish if the nine proposed factors can be distinguished
- Reliability analysis

3.3. THE RESEARCH APPROACH

The research approach utilised is descriptive and subjects are measured only once to determine the association between variables. The questionnaire was administered to an appropriate sample size and the data was utilised to establish the psychometric properties of the talent mindset index. The questionnaire is self-administered and consists of quantitative data gathered on an interval scale. The sample was obtained via an electronic survey as well as through a hand delivered questionnaire which was distributed to managerial as well as human resources staff within an organisation operating in the aviation industry.

Quantitative data analysis was utilised based on the premise that the numerical data could be examined and manipulated to make the relevant observations required (Babbie, 2005) in order to establish the psychometric properties of the Talent Mindset Index.

3.4. THE SAMPLING AND DATA COLLECTION METHOD

It is essential to consider the population and/ or the statistical principles in order to establish an appropriate sample size for the study in order to ensure validity and reliability. The required sample response rate was established by considering a number of best practice principles and it was found that a sample of 150 would be sufficient for this study.

This was determined by assessing two principles. Firstly, the STV (subject to variable) ratio states that 5 respondents are required for every item in a questionnaire. This questionnaire consists of 32 items (excluding biographical variables), thus dictating a sample of 160. Due to the nature and purpose of the study, the "10-case-per-item" rule would set the sample size above the 160 mark to 320. The "10-case-per-item" rule sets the sample size above the minimum needed for exploratory factor analysis (Gorsuch, 1997). Guadoanoli and Velicer (1988), as cited in Gorsuch found that a sample of 150 was appropriate for up to 50 variables; which contradicted the original 10 case- per-item rule and reduced it to 3. The actual people utilised in the sample also affect the value of the results in terms of the representivity of the population.

This would be more appropriate based on the research conducted by MacCullum, Wedaman, Preacher and Hong (2001). The research studied the extent to which sample size, communality level and over determination on recovery of population factors affected the results of empirical studies in exploratory factor analysis, especially in terms of sampling error. The researchers found that "when communalities are high, the sample factor solutions correspond closely to the population solutions, even when N, is small and factors are weakly over determined". Low communalities result in a stronger need for a large sample and level of over determination to retrieve a quality sample solution. (MacCullum, Widaman, Preacher & Hong, 2001). Based on this study and other recent articles as cited in MacCullum *et al* (2001), rules of thumb are not valid. According to Tabachnick and Fidell as cited in Pallant (2001), a sample of at least 300 cases is considered appropriate for factor analysis.

Both rules of thumb and propositions of other researchers have thus been considered to conclude that a sample of 300 is ideal. Statistically however, the minimum sample size for this study would be 150.

The sample for this study was drawn from an organisation operating within the aviation Industry. The sample was acquired through the distribution of the survey to the managerial staff as well as human resources. The link to the electronic online questionnaire was distributed via an executive brief forwarded by the General Manager of Human Resources to the categories of staff identified. The sample was thus obtained via the convenience method which is appropriate given the proven low response rates within this type of study. A convenience sample is a significant limitation for this study based on the fact that the characteristics of the sample could not be controlled to increase the significance of the results obtained. This sample is thus also biased as it does not represent the population accurately due to unwanted influences that could not be controlled.

3.5. THE MEASUREMENT INSTRUMENT

The talent mindset index was constructed by the Human Capital Institute in order to measure talent mindset in industry. It consists of 36 closed ended questions and it purports to measure talent mindset based on the following dimensions:

- Executive Commitment
- Alignment
- Talent Acquisition
- Talent Review Process
- Responsibility
- Resources
- Culture
- Results
- Environment

This instrument is fairly new and has not yet been tested for validity and reliability. It has also not been used in any official studies to date. There is thus a gap in knowledge where the psychometric properties of the instrument are unknown. The aim of the research will thus be to determine the psychometric properties of the instrument in South Africa.

As previously mentioned, the Talent Mindset instrument consists of closed questions. These questions are rated on a five point rating scale ranging from Strongly Disagree (1) to Strongly Agree (5).

The questionnaire takes approximately 20 minutes to complete and can be administered either online or through manual completion. The researcher was available to address any questions of the respondents regarding the survey and its content. All information was kept confidential.

For the purposes of this study, the questions were not ordered under the hypothesised dimensions but were left open for exploration through factor analysis. The outcome of factor analysis will be to establish the validity of the items in the instrument by identifying the factors that are represented. A minimum of three items will be required per factor to indicate a reliable measurement (Gorsuch, 1983). This may however be limited by the fact that some of the dimensions are in fact only represented by two or three variables (See Appendix A).

The next section will address in detail the techniques and procedures for the analysis of the data that has been obtained from the study.

3.6. SAMPLE CHARACTERISTICS

The participation rate for this study was low. The questionnaire was distributed to population of 558 managers and human resource staff collectively. A total response rate of 34.40% was observed of which only 150 responses were deemed suitable for data analysis although the biographic data was captured for 154 respondents. The data collection period was extended from two weeks to two months to attempt to obtain the necessary responses but this was not considered successful. The respondents were required to provide informed consent either online or by signing an informed consent form. The next section will review the methodological research design utilised.

The characteristics of the sample in relation to its biographical variables are displayed in Table 3-1, 2, 3, and 4 respectively. From the information displayed in these tables it is evident that 58.4% of the responses came from males. The age group who provided the largest response was the 30 – 39 years old grouping which provided 51.3% of the responses. Both groupings depicting the age of

the sample younger than 29 (10.4%) and older than 60 (3.2%) provided the smallest returns. It is evident from the table 9 below that 85 respondents or 56.7% of all respondents have 10 years and longer service in the organisation.

Table 3-1
Frequency Table of Gender of Obtained Sample

Gender	Frequency	Valid Percent	Cumulative Percent
Male	90	58.4	58.4
Female	64	41.6	100.0
Total	154	100.0	

Table 3-2
Frequency Table of Age of the Obtained Sample

Age	Frequency	Percent	Cumulative Percent
20-29	16	10.4	10.4
30-39	79	51.3	61.7
40-49	30	19.5	81.2
50-59	24	15.6	96.8
60-69	5	3.2	100.0
Total	154	100.0	

Table 3-3
Frequency Table of Race of the Obtained Sample

Race	Frequency	Percent	Cumulative Percent
African	30	19.5	19.5
Coloured	17	11.0	30.5
Indian	11	7.1	37.6
White	92	59.7	97.3
Other	4	2.6	100.0
Total	154	100.0	

Table 3-4
Frequency Table of Years of Service of the Obtained Sample

Years	Frequency	Percent	Cumulative Percent
Less than 6 months	6	4.0	4.0
6mnths – 1 year	9	6.0	10.0
1-2 years	16	10.7	20.7
3-5 years	8	5.3	26.0
6-10 years	26	17.3	43.3
More than 10 yrs	85	56.7	100.0
Total	154	100.0	

3.7. TECHNIQUES AND PROCEDURES RELATED TO DATA ANALYSIS

The data was captured into SPSS for statistical analysis. As noted earlier, the statistical methods utilised were descriptive statistical analysis, factor analysis and reliability analysis, all with the intention to establish the psychometric properties. The data was summarised in order to establish if it met the required assumptions where after the appropriate methods were selected for the analysis of the underlying dimensions of the survey and the psychometric properties thereof. The methods of analysis are described in more detail in this section in order to provide the reader with an overview of the theory.

3.6.1. Descriptive Statistics

Descriptive statistics are utilised to summarise the data and to ensure that there are no discrepancies in terms of meeting the required assumptions for the statistical techniques that were identified for the study. Due to the fact that there are both categorical and continuous variables, statistics such as mean, medians, standard deviations, frequencies, and tests for outliers were utilised. These statistics enable the researcher to view the data in a more interpretable manner and to proceed with more advanced quantitative methods.

Skewness provides an indication of the symmetry of the distribution whilst Kurtosis provides information about the “peakedness” of the distribution. A value of 0 for both skewness and kurtosis would be obtained for a perfectly normal data set (Pallant, 2001). The test for normality is essential

as the basis to utilise parametric statistical techniques. This test is conducted utilising the Kilmogorov-Smirnov statistic. A non-significant result (>0.5) indicates normality

Frequency analysis was utilised to indicate how many people provided each response and provided insight into the demographic spread of the respondents.

3.6.2. Validity

Validity of a test indicates whether it measures what it is supposed to measure. In order to validate a scale, empirical data must be collected regarding its usage. Four types of validity exist namely face validity, content validity, criterion validity and lastly construct validity.

Face validity refers to the face value that a scale has in terms of the construct it measures- does the construct appear to measure what it says it does? This type of validity is not measurable statistically but is subjective based on perception of the respondent. Content validity is thought to be similar to face validity; however it is concerned with whether the test or scale provides an adequate sample of items that represent the concept (Strydom, Fouche & Delport, 2004). Content validity is concerned with the judgement of experts.

The next two types of validity discussed can be tested empirically. Criterion validity (Strydom *et al*, 2004) is concerned with the multiple measurement of an instrument, where the scores of the instrument are tested against a reliable and valid external criterion. This external criterion is believed to measure the same concept as the instrument (Strydom *et al*, 2004). The last type of validity is construct validity. This is concerned with how an instrument measures a construct theoretically (Pallant, 2001). It is concerned with "the meaning of the instrument i.e. what it is measuring, and how and why it operates the way it does". (Strydom *et al*, 2004). Construct validity is "the degree to which the variables that are measured represent the theoretical construct on which they are based, and the degree to which that construct relates to other constructs in the expected manner" (Murphey, 2009).

This study focuses on testing the psychometric properties, with a specific focus on the construct validity of a talent mindset instrument. This was statistically determined through establishing the relationship between the items of the scale.

3.6.3. Factor Analysis

The technique utilised to test the construct validity of the talent mindset instrument is factor analysis. This type of analysis involves testing the items within an instrument to assess the degree to which they relate. This determines whether they are relevant to the specific construct being tested and assists the researcher in identifying the dimensions of the instrument by clustering items measuring similar aspects of a construct (or constructs) together. According to Pallant (2001), factor analysis enables the researcher to extract a more manageable number of dimensions or factors from a large set of items. This allows the researcher to form a smaller set of subscales in scale development (Pallant, 2001). Hair, Black, Babin, Anderson and Tatham (2006) classify factor analysis as an interdependence technique "whose primary purpose is to define the underlying structure among the variables in the analysis. At this stage it is pertinent to distinguish between two methods of factor analysis, namely component factor analysis and common factor analysis. In component factor analysis, the primary concern is to reduce the data whereas in common factor analysis the concern is to identify the "latent dimensions or constructs represented in the original variables (Hair *et al*, 2006). Common factor analysis can be classified into two types of assessment, namely exploratory factor analysis and confirmatory factor analysis. These will be defined more clearly in the ensuing paragraphs. More specifically the factor analysis discussed is referred to as R factor analysis (Habing, 2003)

Exploratory factor analysis (EFA) is concerned with assessing the construct validity during the initial development of an instrument. EFA requires a substantive amount of inductive reasoning as the answers are not clear-cut and require interpretation and manipulation from the researcher in light of expert knowledge. More specifically, EFA requires conceptual interpretability; the researcher must be able to retain a factor if it is interpretable in a meaningful manner regardless of the empirical evidence for retention (Worthington & Whittaker, 2006). In this manner the most meaningful results will be obtained from the procedure. EFA often does not lead to a definite outcome but provides more clarity in terms of the proposed scale dimensions and its items (Worthington *et al*, 2006).

In order to yield a more substantiated result EFA is often followed by confirmatory factor analysis (CFA). This process lends itself to deductive reasoning and is based on testing the scale against a theoretical model. Structural Equation Modelling is the preferred method of CFA. Prior knowledge of the expected relationships between items and factors is critical as the primary purpose of CFA is

to confirm the extent to which the researcher's measurement model is replicated in the sample data (Worthington *et al*, 2006).

As a summary of the two types of factor analysis, Hair *et al* (2006) states that exploratory factor analysis is useful in searching for structure in the variables and does not set any constraints on the number of factors that can be extracted. Confirmatory factor analysis however, is utilised when the researcher has a framework according to which the variables are expected to cluster based on either theory or other research (Hair *et al*, 2006).

In terms of this study, EFA was the main method utilised to determine the construct validity of the talent mindset instrument based on the fact that talent mindset is still a fairly new and unexplored construct. The factors are unexplored and need to be extracted. Further research will be required following this study to confirm an established framework for talent mindsets.

In order to conduct factor analysis the data was assessed in terms of its suitability. Firstly, the sample size for the study has already been taken into consideration for this study. It has to be reiterated that the sample size plays a large role in conducting factor analysis and it is thus critical that a large enough sample is obtained. As noted in Hair *et al* (2006), it is important to attempt to gather the highest cases-per-variable ratio in order to reduce the chances of "overfitting the data" i.e. obtaining factors that are not generlisable because they are so specific to the sample.

The second test of appropriateness for factor analysis is in determining the strength of the inter-correlations between the items. Tabachnick and Fidell, as cited in Pallant (2001), recommend that the correlation matrix is analysed for evidence of coefficients greater than 0.3, this criteria is supported by Hair *et al* (2006) amongst others (Habing, 2003). If only a few correlations above this are found, factor analysis may not be a valid method. The partial correlations can also be examined as an indication of suitability. If the partial correlations are above 0.7, then they are considered high and factor analysis will thus be inappropriate (Hair *et al*, 2006). A good summary of the criteria for a reliable factor is provided by Stevens (Cited in Habing, 2003):

"A factor is reliable if it has:

- 3 or more variables with loadings of 0.8 and any *n*
- 4 or more variables with loadings of 0.6 and any *n*
- 10 or more variables with loadings of 0,4 and *n* bigger or equal to 150

- Factors with only a few loadings require *n* bigger equal to or bigger than 300"

Two tests within SPSS can be utilised to determine the suitability of the data for analysis, namely Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy.

- The Bartlett's test of sphericity should be significant ($p<0.05$)
- The KMO index should be above 0.6 for a good factor analysis
  (Pallant, 2001)

It must be noted that Worthington *et al* (2006) concluded that Bartlett's test of sphericity is only really valid if the sample size is smaller than 150. The researcher was able to obtain a sample of over 150 and thus this test was insignificant although it was still conducted in conjunction with the measure of sampling adequacy. Hair *et al* (2006) proposes that the overall value of the measure of sampling adequacy (MSA) should be above .50.

The factor loadings of factor analysis refer to the correlation coefficients between the variables and the factors. According to Hair (Cited in Garson, 2009), in exploratory factor analysis, the interpretation of factor loadings will be to accept a factor of 0.6 as high, and those below 0.4 as low. The key however, in exploratory factor analysis is to interpret factors in light of the relevant theory.

The next step was to extract the factors which represent the construct most appropriately. A number of tests exist which enable the researcher to judge which are the most relevant factors to retain namely the Eigenvalue rule, Scree test and Horn's Parallel analysis. Each of these will be discussed below:

- Eigenvalue rule (Kaiser's Criterion):

An eigenvalue of a factor is the amount of total variance explained by that factor. This rule depicts that factors are retained if the eigenvalue is 1 or more. Costello and Osborne (2005) pointed out that there is broad consensus that this is among the least accurate method for selecting the factors to retain and, it results in the retention of too many factors. Hair *et al* (2006) however defined the criteria for establishing the reliability of the cut off in terms of the number of variables. If the variables are between 20 and 50 the cut off can be interpreted reliably, however if there are less than 20, too few factors are extracted. Alternatively, if there are over 50 variables, too many factors would be extracted.

- Scree test:

"The scree test is utilised to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance structure." (Hair *et al*, 2006). This involves an examination of the eigenvalues in graphical form, and looking for a natural break point in the data where the curve flattens out. The factors to retain will be those data points above the "break" (Fabrigar, Wegener & MacCullum, 1999). The Scree test is however subject to subjectivity and ambiguity (Fabrigar *et al*, 1999).

- Horn's parallel analysis:

This procedure involves the random ordering of scores and the utilisation of these scores in a test against the originally ordered data. The eigenvalues are then examined to establish which factor to retain. A factor will be retained if the original eigenvalue is larger than the eigenvalue from the random data. (Worthington *et al*, 2006)

For the purposes of this study all three methods mentioned above were considered in order to assess the factors to retain within the data, with the hope that this will limit subjectivity and increase the accuracy of retaining the correct factors from both a quality and quantity perspective. Another consideration was the percentage of variance explained; Habing (2003) advises that as many factors as are required should be retained to explain at least 50% of the variance.

After the relevant factors were selected, the various options for the factor structure were explored in order to select a final factor solution. Thurstone (Cited in Fabrigar *et al*, 1999) proposed that the solution with the best simple structure would be the most easily interpretable, psychologically meaningful and replicable. Two methods of rotation exist namely orthogonal and oblique rotation. Orthogonal rotation constrains factors to be uncorrelated and the main application of this rotation is varimax rotation, which is utilised in psychological research. This rotation has been criticised in that it allows for simple factor bias. Gorsuch has stated that varimax rotation is the worst method for item factor analysis because there is no way to overcome the simple structure bias (Gorsuch, 1997).

Oblique rotation allows for an unrestricted solution and will give uncorrelated factors that provide a reasonable solution (Gorsuch, 1997). Methods of oblique rotation include promax and oblimin factor rotation. Generally, researchers select orthogonal rotation methods due to ease of interpretation. However, Costello *et al* (2005) concluded that in social sciences some correlation among factors is expected due to the fact that forms of behaviour generally affect one another. Orthogonal rotation

would thus result in a loss of valuable information. Oblique rotation would theoretically render a more reproducible solution. (Costello *et al*, 2005). Fabrigar (1999) amongst others (Hair *et al,* 2006), also supported this view and stated that oblique rotations provide a more realistic representation of how constructs are likely to be related and thus clusters the variables more accurately.

Fabrigar *et al* (1999) indicated that "there exists an infinite number of alternative orientations of the factors….that will explain the data equally well". This means that EFA models with more than one factor do not have a unique solution (Fabrigar *et al*, 1999). The factors thus needed to be manipulated to assess the interpretability of the factors in terms of theory. This was achieved via rotation.

It must be emphasised that rotation does not alter the factors per se but rather aims to simplify and clarify the data structure (Costello & Osborne, 2005). According to Hair *et al* (2006), "the ultimate effect of rotating the factor matrix is to redistribute the variance from earlier factors to later ones in order to achieve a simpler, theoretically more meaningful factor pattern." If only one factor is found to exist, no other factors are available to redistribute variance to.

The data was assessed for the 'cleanest' factor structure. Costello *et al* (1999) define this, as factors with item loadings above .30, no or few item cross-loadings (items that load at .32 or higher on two or more factors), and no factors with fewer than three item loadings. This indicates the factor structure with the best fit to the data. According to Hair *et al* (2006), factor loadings with .30 only meet the minimal level for interpretation of the structure. Loadings of .50 are practically significant, but loadings that are exceeding .70 are considered indicative of a well-defined structure. A good fit of the data indicates the construct validity of the Talent Mindset scale.

3.6.4. Reliability

Bostwick and Kyte (Cited in Strydom *et al*, 2004) state that reliability is defined as "the accuracy or precision of an instrument; as the degree of consistency or agreement between two independently derived set of scores; and as the extent to which independent administrations of the same instrument yield the same (or similar) results under comparable conditions" (Strydom *et al*, 2004).

For the purposes of this study, Cronbach's alpha coefficient was utilised as the measure of internal consistency. Pallant states that a scale with less than one item will result in low Cronbach's Alpha values and in this event the mean inter-item correlation should be reported (Pallant, 2001). The talent mindset questionnaire however has a total of 36 items and this is thus suitable for assessing Cronbach's alpha values to determine the reliability of the scale. Values of over .7 were considered to reflect reliability (Nunnally, cited in Pallant, 2005).

3.8. CONCLUSION

This chapter detailed the methodological approach that was utilised to conduct the study. All results were extracted through the SPSS program after which they were interpreted. The outcomes of this analysis were aimed at determining the validity and reliability of the survey, more specifically to understand the underlying dimensions thereof.

The next chapter will detail, analyse and interpret the results of the study and is viewed as the most critical chapter of this research.

CHAPTER FOUR: RESULTS

4.1. INTRODUCTION

The previous chapter highlighted the methodological approach and processes utilised to establish the psychometric properties of the talent mindset instrument. This chapter will focus on depicting and interpreting the results obtained from the statistical procedures described in chapter three. More specifically, it will detail the descriptive statistics, the outcomes of exploratory factor analysis as well as the results regarding the reliability of the instrument.

4.2. DESCRIPTIVE STATISTICS

This survey was targeted at managerial and human resources staff under the premise that HR supports a talent mindset, whilst line management drives it. The survey was thus distributed to approximately 508 managers and 50 employees in the human resources field to be completed online. The online analysis of responses indicated that only 192 employees participated, of which 36 did not complete the survey in totality. The total response rate can thus be calculated at 35%. Only 28% of the responses were completed in totality for utilisation in this study (n=150). The response rate however reflected the minimum required response to be able to proceed with factor analysis.

Further descriptive analysis of the data is detailed in Table 4-1 and provides an overview of the number of response, missing data, measures of central tendency and dispersion, including measures of normality. Of particular importance are the indicators of distribution which assess normality which is a prerequisite for conducting parametric statistical techniques (Pallant, 2005) - including factor analysis. As noted previously, a non-significant result (>0.5) indicates normality. In analysing skewness and kurtosis, and for small samples, measures of between -2.5 and +2.5 reflect normality (O'Neil, 2004).

Table 4-1
Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TMI1	150	3.05	1.143	-.065	.198	-.740	.394
TMI2	150	2.92	1.071	-.071	.198	-.870	.394
TMI3	150	2.35	.977	.551	.198	-.170	.394
TMI4	150	2.17	.910	.622	.198	-.033	.394
TMI5	150	2.12	.874	.802	.198	.773	.394
TMI6	150	2.37	.930	.473	.198	-.403	.394
TMI7	150	2.45	.879	.435	.198	-.301	.394
TMI8	150	2.79	1.051	.002	.198	-.949	.394
TMI9	150	2.54	1.053	.452	.198	-.725	.394
TMI10	150	2.47	.925	.673	.198	.171	.394
TMI11	150	2.47	1.014	.248	.198	-.584	.394
TMI12	150	2.27	.960	.640	.198	.095	.394
TMI13	150	2.41	.997	.344	.198	-.601	.394
TMI14	150	2.41	.991	.452	.198	-.355	.394
TMI15	150	2.07	.939	.902	.198	.529	.394
TMI16	150	1.95	.817	.622	.198	-.042	.394
TMI17	150	2.66	1.134	.086	.198	-1.123	.394
TMI18	150	2.43	1.071	.492	.198	-.492	.394
TMI19	150	2.13	.950	.789	.198	.240	.394
TMI20	150	2.11	.942	.760	.198	.033	.394
TMI21	150	2.31	.935	.732	.198	.491	.394
TMI22	150	2.30	.988	.761	.198	.350	.394
TMI23	150	2.19	.965	.888	.198	.831	.394
TMI24	150	2.20	.912	.613	.198	-.062	.394
TMI25	150	2.37	1.052	.446	.198	-.610	.394
TMI26	150	2.31	.991	.510	.198	-.408	.394
TMI27	150	2.56	.923	.003	.198	-.371	.394
TMI28	150	2.83	.965	.205	.198	-.310	.394
TMI29	150	3.30	1.169	-.453	.198	-.659	.394
TMI30	150	2.56	1.020	.393	.198	-.282	.394
TMI31	150	2.31	1.010	.383	.198	-.588	.394
TMI32	150	3.81	1.060	-.736	.198	-.008	.394
TMI33	150	3.57	1.032	-.404	.198	-.595	.394
TMI34	150	3.39	1.067	-.120	.198	-.938	.394
TMI35	150	3.95	1.051	-.749	.198	-.207	.394
TMI36	150	3.77	.958	-.489	.198	-.437	.394
Valid N (listwise)	150						

As can be seen in Table 4-1, the results indicate that there are no measures of skewness or kurtosis that fall out of the range of -2.5 to 2.5, and thus the data for this study has normality. The initial descriptive statistics indicated a suitability to continue with an analysis of the data to establish suitability for exploratory factor analysis.

4.3. EXPLORATORY FACTOR ANALYSIS

A number of factors are taken into consideration in determining the suitability of the data for factor analysis, which includes sample size, ratio of subjects to items as well as indicators such as the KMO and Bartlett's test of sampling adequacy and sphericity.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy indicated the adequacy of the data to proceed with Exploratory Factor Analysis. It recorded a value of 0.854 which is significant. Pallant (2001) indicated that the KMO index should be above 0.6 for a good factor analysis; Field (2000) also notes that the KMO should be larger than 0.5 which will indicate that the data is adequate. The result that was obtained is thus satisfactory and indicates suitability of the data for further analysis.

Bartlett's test of sphericity is utilised to establish if the "R-matrix resembles an identity matrix' (Field, 2000), i.e. variables correlate only with themselves. According to Pallant (2005), Bartlett's test of sphericity should be significant ($p<.05$) in order for the utilisation of factor analysis in a study. The larger the sample though, the less likely this occurs and therefore this test was not required as the sample is over 150. The data set complies with the requirements of sampling adequacy (0.854) and sphericity, and could thus be subjected to factor analysis.

The methodological approach indicated that eigenvalues (the total amount of variance explained by a factor) would be utilised as a method to determine which factors would be extracted. The number of variables in the survey are 36 for the talent mindset, which translates into a confidence that the cut off of eigenvalues can be accurately interpreted i.e. the ideal number of factors will be extracted (Costello & Osbourne, 2005). It is also important to note the 'total variance explained' by those extracted values in order to establish with confidence that talent mindset can be explained by these factors and not some other extenuating variables.

Table 4-2 below, reflects that a total of nine factors were extracted for further analysis (reflecting eigenvalues of over 1). The initial analysis reflected a cumulative explained variance of 64.90%, however, after the nine factors with eigenvalues over one were extracted, this variance dropped to 53.90%. In other words, the nine extracted factors account for 53.90% of the total explained variance. It is therefore also worthy to note that at this stage it will be pertinent to retain nine factors in order to explain at least 50% of the variance in the data as detailed by Habing (2003).

Table 4-2
Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	10.831	30.086	30.086	10.403	28.897	28.897
2	2.739	7.609	37.695	2.271	6.308	35.205
3	1.792	4.977	42.672	1.304	3.623	38.828
4	1.689	4.691	47.364	1.263	3.508	42.336
5	1.499	4.165	51.529	1.106	3.072	45.408
6	1.336	3.712	55.241	.888	2.467	47.875
7	1.299	3.609	58.849	.828	2.301	50.175
8	1.139	3.165	62.014	.731	2.029	52.204
9	1.038	2.883	64.898	.595	1.652	53.856
10	.973	2.702	67.600			
11	.950	2.638	70.238			
12	.883	2.454	72.691			
13	.792	2.200	74.891			
14	.775	2.152	77.043			
15	.753	2.093	79.136			
16	.640	1.779	80.915			
17	.618	1.717	82.631			
18	.576	1.599	84.230			
19	.568	1.578	85.808			
20	.527	1.464	87.272			
21	.509	1.415	88.686			
22	.433	1.204	89.890			
23	.421	1.169	91.059			
24	.374	1.040	92.099			
25	.346	.960	93.059			
26	.332	.921	93.980			
27	.308	.857	94.837			
28	.291	.809	95.646			
29	.263	.732	96.377			
30	.247	.687	97.065			
31	.224	.622	97.687			
32	.211	.586	98.273			

33	.189	.526	98.799
34	.178	.496	99.294
35	.136	.377	99.672
36	.118	.328	100.000

Extraction Method: Principal Axis Factoring.

The initial analysis indicates that factor one contains a high eigenvalue (10.403) as opposed to the following eight factors which decline from an eigenvalue of 2.271 to 1.106. There is a strong indication that only one factor may exist in this index, however this single factor only accounts for 28.90% of the explained variance in the data set.

Table 4-3 below, indicates the factor matrix, detailing correlations between items and how items load on each extracted factor. It must be emphasised that in reviewing these results, a researcher could retain a factor if it is interpretable in a meaningful manner, regardless of the empirical evidence for retention (Worthington & Whittaker, 2006). The factor was also assessed in light of the criteria provided by Stevens (cited in Habing, 2003). More specifically:

"A factor is reliable if it has:

- 3 or more variables with loadings of 0.8 and any *n*
- 4 or more variables with loadings of 0.6 and any *n*
- 10 or more variables with loadings of 0,4 and *n* bigger or equal to 150

A simpler framework for interpretation was also considered as identified by Hair (cited in Garson, 2009), the interpretation of factor loadings will be to accept a factor of 0.6 as high, and those below 0.4 as low.

In assessing the factor matrix provided in Table 4-3 below, the following results were identified.

- Factor one contains 13 variables with loadings between 0.4 and 0.6 and then a further 16 variables with loadings ranging from 0.6 to 0.732 and thus represents a reliable factor
- Factor two contains only three variables over 0.6 and two over 0.5, the number of variables do however not result in the interpretation of a reliable factor.
- Factor five contains only one variable with a loading over 0.4 and therefore this factor is not considered reliable.

Table 4-3
Factor Matrix

	Factor								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
TMI1	.367	-.158	.438	.016	.435	.042	-.052	-.039	.146
TMI2	.510	-.051	.143	.196	.243	-.100	-.044	-.217	.079
TMI3	.582	-.026	.061	.284	.031	.064	-.160	-.024	.036
TMI4	.615	-.077	.113	.044	.074	.144	-.405	-.035	-.047
TMI5	.627	.081	.176	.031	-.134	-.099	-.162	-.175	-.093
TMI6	.693	-.018	-.100	.201	-.056	.062	-.076	-.186	.015
TMI7	.619	.017	.019	.058	.257	.017	-.218	-.040	.006
TMI8	.479	.068	.173	.370	.091	.093	.017	.128	-.212
TMI9	.445	.036	.100	.337	-.228	.081	-.112	.038	-.125
TMI10	.595	-.182	.293	.131	-.124	-.013	-.001	.078	-.085
TMI11	.528	-.111	-.020	-.268	.117	.239	-.116	.219	-.063
TMI12	.500	-.105	.079	.000	-.056	.196	.045	.157	.182
TMI13	.612	.022	.271	-.211	-.254	.178	.042	-.039	-.106
TMI14	.672	.031	.326	-.288	-.316	.150	.281	-.203	-.073
TMI15	.676	-.073	-.140	-.193	-.056	.085	.031	.209	.067
TMI16	.694	-.094	-.078	-.060	-.222	.019	-.110	.004	.193
TMI17	.620	.185	-.271	-.071	.374	.254	.275	-.216	-.191
TMI18	.652	.201	-.154	-.019	.285	.185	.267	-.060	.028
TMI19	.640	.087	-.257	.039	-.073	-.190	.002	-.324	-.024
TMI20	.507	-.166	-.258	-.166	.236	.122	-.031	.146	-.051
TMI21	.640	-.030	-.305	.187	-.011	-.255	.013	.212	-.077
TMI22	.619	-.069	-.249	.200	-.097	-.132	.113	.103	-.046
TMI23	.691	.072	-.236	-.087	-.189	-.047	.015	-.045	.013
TMI24	.612	.061	.032	-.293	.166	-.396	-.078	.115	-.158
TMI25	.581	-.024	.193	-.354	.161	-.344	.031	.079	.172
TMI26	.732	.029	-.053	-.109	-.061	-.189	-.052	-.027	.075
TMI27	.445	.003	-.048	.202	-.034	-.032	.070	.276	.009
TMI28	.413	.007	.268	-.054	.027	-.067	.185	.043	.139
TMI29	.181	-.006	.189	.332	.030	-.073	.398	.137	.074
TMI30	.460	.160	-.116	-.128	-.163	-.065	-.003	-.097	-.070
TMI31	.579	-.109	-.092	.131	-.146	.096	.123	.048	.249
TMI32	-.021	.603	.139	.146	.060	-.209	.057	-.076	.107
TMI33	.070	.579	.009	-.160	-.120	.166	-.137	.125	.150
TMI34	.026	.746	-.151	.105	.033	.124	-.125	-.013	.292
TMI35	-.025	.626	.105	-.059	.026	.044	-.068	.184	-.223
TMI36	.095	.584	.174	-.002	-.011	-.085	.078	.108	-.150

Extraction Method: Principal Axis Factoring.

a. 9 factors extracted. 16 iterations required.

In summary, factor one is the only reliable factor found in the structure. On account of the literature reviewed and the empirical findings this factor is interpreted to represent Talent Mindset. The poor variable loadings on the other eight factors in the structure, as well as the high number of loadings of 0, indicate that this is the cleanest structure as there are too many indicators that there is in fact only the one factor. Fabrigar *et al* (1999) indicated that "there exists an infinite number of alternative orientations of the factors….that will explain the data equally well". This means that EFA models with more than one factor do not have a unique solution (Fabrigar *et al*, 1999). In this model however, there is only one factor and thus it can be reasoned that only one unique solution will exist. It is in light of this, that the no rotation was completed for this study.

This results in a doubt around the construct validity of the survey's proposed dimensions in terms of the current methodology, and leads to the conclusion that the only factor that exists within this index is "Talent Mindset".

4.4. RELIABILITY

Reliability is critical for this study as an unreliable instrument cannot be valid. For the purposes of this study the internal consistency of the questionnaire was tested utilising Cronbach's coefficient alpha. This measurement tested the "degree to which each item in a scale correlates with each other item" (Terre Blanche & Durrheim, 1999). An acceptable value of greater than .75 for the Cronbach's Alpha indicates reliability (Terre Blanche *et al*, 1999). Nunnally (cited in Pallant, 2005) purposes a more lenient measure of 0.7.

Table 4.4
Overall Reliability Statistics

Cronbach's Alpha	N of Items
.935	30

The overall Cronbach's Alpha of the reviewed talent mindset variables is satisfactory at .935, as reflected in Table 4-4 above. Only 30 items have been identified to reflect the single dimension found, namely Talent Mindset, and were more closely examined for their reliability. It is common to find high reliability coefficients when one factor is retained.

4.5. ITEM ANALYSIS

Item analysis is based on evaluating items on how well they discriminate between those respondents whose scores are high and those whose scores are low. The item analysis is conducted to test the reliability of the Index's proposed dimensions and to extract those items that most relate to the construct of talent mindset (Gorsuch, 1997).

Guilford and Fruchter (1978) states that many of the statistical operations involved in dealing with tests have to do with item analysis. The major goals of item analysis are the improvement of total-score reliability and/or total-score validity, the achievement of better item sequences and better types of score distributions. Item analysis procedures are focussed on differentiating between better and poorer items.

Table 4-5 depicts the item total statistics with the reliability coefficient (Cronbach's Alpha) if the item is deleted.

Garson (2009) stated that a Cronbach Alpha of 0.70 or higher is considered to be acceptable but also noted that some researchers will consider a Cronbrach Alpha of 0.80 as the cut-off to be considered a 'good scale'. Table 4-7 indicates a Cronbach Alpha Coefficient of 0.935 which indicates that the TMI is highly reliable, and can consistently measure the items representing a talent mindset. This indicates that the Talent Mindset index has a high level of homogeneity amongst the items used and is capable of consistently reflecting the same underlying constructs. This reliability can be even further improved by adding additional items which accurately represent the construct (Garson, 2009).

In summary, the data set has produced one factor that will subsequently be utilised for comparison with the norm group. A Cronbach Alpha Coefficient of 0.935 has been obtained which indicates high reliability.

Table 4-5
Item Total Statistics for the TMI

	Mean if Item Deleted	Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TMI1	69.01	286.429	.355	.936
TMI2	69.14	282.376	.498	.934
TMI3	69.71	281.793	.570	.933
TMI4	69.89	282.490	.593	.933
TMI5	69.94	283.010	.601	.933
TMI6	69.69	279.905	.665	.932
TMI7	69.61	282.749	.607	.932
TMI8	69.27	284.022	.461	.934
TMI9	69.52	285.271	.424	.935
TMI10	69.59	282.499	.582	.933
TMI11	69.59	283.048	.509	.934
TMI12	69.79	284.957	.480	.934
TMI13	69.65	280.993	.582	.933
TMI14	69.65	279.705	.627	.932
TMI15	69.99	280.141	.650	.932
TMI16	70.11	282.558	.663	.932
TMI17	69.40	278.322	.577	.933
TMI18	69.63	278.074	.623	.932
TMI19	69.93	281.391	.601	.932
TMI20	69.95	285.145	.485	.934
TMI21	69.75	281.627	.604	.932
TMI22	69.76	280.976	.589	.933
TMI23	69.87	279.400	.655	.932
TMI24	69.86	282.873	.578	.933
TMI25	69.69	280.979	.549	.933
TMI26	69.75	277.291	.702	.931
TMI27	69.50	287.326	.424	.934
TMI28	69.23	287.438	.400	.935
TMI30	69.50	285.460	.434	.934
TMI31	69.75	281.382	.562	.933

4.6. RELIABILITY ANALYSIS OF TMI SUB-SCALES

A reliability analysis was conducted on the subscales of the TMI with the results portrayed in Table 4-7. The mentioned sub-scales referred to are as follows:

- Executive Commitment
- Alignment
- Talent Acquisition
- Talent Review Process
- Responsibility
- Resources
- Culture
- Results

Table 4-6
Reliability of Theoretical Subscales

	Cronbach's Alpha	N of Items
Executive Commitment	0.742	5
Alignment	0.698	2
Talent Acquisition	0.693	3
Talent Review Process	0.822	6
Responsibility	0.784	4
Resources	0.785	3
Culture	0.763	2
Results	0.650	11

An examination of the reliabilities on the “theoretical subscales” originally defined in the index indicated that the coefficient ranges from .650 to .822 as shown Table 4-6. The results of the theoretical subscales of ‘Alignment’, ‘Talent Acquisition’ and ‘Results’ are the only values that do not comply to the recommendation of a minimum level of .7 by Nunnally (cited in Pallant, 2005) or .75 by Terre Blanche (1999).

The below standard level reliability for the alignment, talent acquisition and results scale confirms the result of the need to either modify or remove some of the items from the questionnaire which occur within these theoretical subscales. A further attribute to the low reliability may be the low number of items developed to define each of these proposed subscales.

Bostwick and Kyte (cited in De Vos, 2002) render the following observation “High reliability does not guarantee valid results, but there can be no valid results without reliability”. Thus these three proposed dimensions further preclude themselves with their low reliability.

4.7. TEST FOR NORMALITY OF BCQ

In order to determine the normality of the scale obtained in the factor analysis, the Kolmogorov-Smirnov test was performed. Table 4-8 indicates that the scale conforms to normality. The Z-statistic is 0.669, which is greater than 0.05, which means that the data is normally distributed. Unlike most statistical testing, a non-significant result is sought after here. From Table 4-7 it is concluded that the BCQ seems to be suitable for parametric statistical procedures in this study.

Table 4-7
Kolmogrov-Smirnov Test for the BCQ

		Talent Mindset Index
N		150
Normal Parameters[a,,b]	Mean	93.8467
	Std. Deviation	18.10437
Most Extreme Differences	Absolute	.055
	Positive	.055
	Negative	-.029
Kolmogorov-Smirnov Z		.669
Asymp. Sig. (2-tailed)		.762

a. Test distribution is Normal.

b. Calculated from data.

As a summary to the statistical process so far, the following can be noted:

- The statistical process provided one factor that can be used for comparison with the norm group.
- The identified scale conforms to normality.
- The Cronbach Alpha coefficient indicates that the scale have high acceptable reliability and can consistently measure the particular dimensions of the magnitude it is designed to measure. In other words, the measuring instrument is capable of consistently reflecting the same underlying constructs. Furthermore, it indicates a high degree of homogeneity between the questionnaire items.

4.8. CONCLUSION

The initial analysis of the data's descriptive statistics indicated that the data was normally distributed with all values for both skewness and kurtosis ranging from -2.5 to 2.5. The KMO also reflected that the overall sample size lent to the ability to proceed with detailed factor analysis (.854).

In conducting the exploratory factor analysis, an initial analysis of the eigenvalues and variance explained, led to the decision to retain nine factors. Upon a more detailed inspection of the factor matrix, it was found that most of the items loaded strongly on factor one, with an insignificant loading of variables on the further eight factors. The fact that nine factors were extracted and nine dimensions were proposed in the original instrument indicates that more items should be explored for each of these dimensions. A total of 30 out of the 36 items were retained for the purposes of this study which all loaded comfortably on factor one. The researcher therefore concludes that factor one would represent Talent Mindset as the factor as opposed to Talent Mindset being constructed out of nine dimensions in the index.

The reliability analysis, indicated that the total instrument (measuring only 30 items as opposed to 36), has a high degree of reliability (.935). The instrument could thus be utilised as a reliable and valid measure of Talent Mindset.

This chapter revealed the findings of the statistical analysis. The next chapter will focus on discussing the findings in light of theory as well as providing recommendations for future research.

CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The literature as well as the results of the statistical analysis was detailed in the previous chapters of this study. The focus will now revert to discussing the results and the implications of these, in light of the literature, on the research question posed. An overview will be provided of the objectives of the study, the research question (s), and the literature results. The findings of the study will be detailed with due consideration of both the literature as well as of the outcomes of the statistical analysis. Lastly, the limitations on the study as well as the related recommendations will be reviewed in order to finalise the study.

5.2 OBJECTIVES OF THE STUDY AND MOTIVATION

The main objective of this study was to determine whether the instrument reflects a true measurement in establishing the mindset of managers and human resource Professionals towards talent. To date, no instrument has been statistically analysed within the South African market to determine the talent mindset within organisations. If the psychometric properties of the instrument translated into indicating that it is both valid and reliable, it would have proved beneficial in targeting and prioritizing specific interventions required for improving the competitive advantage of an organisation in relation to mindset.

This research provides further impetus for exploring talent mindset and its link to variables affecting business success. It may even lead to a change in direction in the approach of studying talent and its related mental models, mindset and attitudes. The determination of the deeper underlying dimensions driving the behaviour towards talent will significantly influence how organisations approach the war for talent and the quest to build human capability within an organisation.

5.3 RESEARCH QUESTION

The aim of this study was to determine the psychometric properties of the talent mindset index. The two research questions posed in this regard are therefore:

- Does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?
- Is the talent mindset index reliable?

5.4 LITERATURE OVERVIEW

The literature review was comprehensive and reviewed not only the history of mindsets but the theoretical basis of what mindsets consist of namely, mental models; the distinction between these and a talent culture, as well as what the distinction is between tangible and intangible assets. This section has the purpose of providing a summary of the literature to allow for interpretation of the empirical findings in light of theory.

Mental models have been referred to by many as assumptions and generalisations about external reality which are formed by individuals (Chinastaff, 2009; Senge in Spicer, 1998; Blackman & Lee-Kelley, 2006). Literature shows that mindsets are in fact based on mental models which have been reinforced over time by their consistent and successful utilisation. These mindsets are referred to as “hardened attitudes about the value and effectiveness of the paradigms and mental models” (Duffy, 2009). Duffy (2009) provides a framework for understanding the relationship between paradigms, mental models, mindsets and behaviours. This framework denotes mental models and paradigms as reflecting a way of thinking, whereas mindsets reflect beliefs and, behaviours reflect the actual actions taken, the ‘doing’.

“Given a dominant paradigm, its related mental models, and the mindsets supporting the paradigm and mental models, individuals, groups and entire [organisational systems]…begin to devise strategies for how to behave within the dominant paradigms and about how to implement effectively their chosen mental models” (Duffy, 2009). Individuals proceed to implement observable behaviours which reflect their chosen strategies. If these behaviours are successful, the paradigms, mental

models and mindsets are reinforced. The abovementioned framework can evolve further into understanding culture formation which will be reflected in proven behaviours which are reinforced within the group over time and become the 'way we do things around here'

Figure 5-1 demonstrates the framework which was adapted from Duffy (2009).

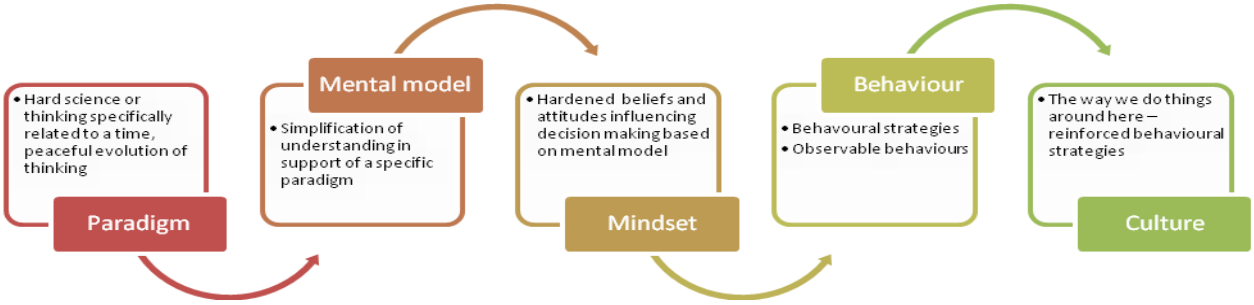

Figure 5-1: Framework adapted from Duffy (2009)

It is crucial for organisations to come to the realisation that mental models and mindsets can determine organisational success, especially when it is considered that organisational practices rely on human behaviour and the inherent beliefs of individuals (Losey *et al,* 2005). It is also highlighted that mental models are implied by "an organisation's ongoing practices, which creates an interesting link for the rest of this literature review where talent conceptualisations of practices, mindsets and culture are considered (Losey *et al,* 2005).

The literature also focused on the movement and evolution of theory in order to gain an understanding of the mindset towards talent in that time period. The literature reviewed the progression of theory from as early at the late 1700's where Robert Owen established concern for employee wellness in a factory driven model of productivity, through to the current times where knowledge workers and the management of 'talent' is of key importance to achieving business success. The focus is on talent management practices which meet the business strategy and are not only aligned but completely integrated (Jones, 2007).

Organisations require talented individuals to drive real value and sustained business performance (Cheese *et al,* 2008). In order to achieve this, organisations embark on various talent management initiatives focusing on the attraction, selection, development, engagement and retention of those skills that are considered critical to the organisational mission and the fulfilment of its vision. The one shortcoming of an organisation that results in a failure of the talent management initiatives is related to the current mindset towards talent, held not only by those who drive the organisation but those needed to implement plans at an operational level. More specifically, the success of the initiatives is largely driven by the following:

- CEO commitment
- Alignment with business strategy
- Line managerial commitment to developing talent

It is important to consider the extensive impact that leadership has on talent mindset. From the literature it is clear that mindsets originate with the leadership of the organisation and then is further cascaded into the organisation through demonstrated support for talent management and its associated practices.

The proposed dimensions of the talent mindset index are well supported by the literature. The talent management focus areas as well as indicators that drive successful change appear to provide a good framework within which to review the dimensions.

- Executive Commitment
- Alignment
- Talent Acquisition
- Talent Review Process
- Responsibility
- Resources
- Culture
- Results
- Environmental Factors

As highlighted in the literature, in order to successfully harbour talent which steers organisational success, an organisation needs strong executive commitment recognising the importance of talent to secure and drive its business strategy. It requires a strong degree of alignment between the

business strategy and talent practices. The process of acquiring talent should be geared towards a notion that talent should be spotted in the market, regardless of a mandate to fill vacant positions. The process of identifying top talent should be carefully defined, are the A and B the 'talent' of the organisation, or do we view all individuals placed in the right positions at the right time as talent?

The accountability for talent should be clearly defined within the organisation. It is critical to establish the mindset that acknowledges all stakeholders accountable for talent not just human resources. The need to allocate the appropriate resources to the drive for talent management must also be established. Any initiative is sure to fail if the correct amount of resources is not allocated to drive the success of the initiative. The entrenchment of processes supporting talent results in a long term culture geared towards talent to exist in the organisation. The evidence of a positive talent mindset will be seen in the strategies employed by the organisation as well as various measures of organisational success. The overall symptomatic issue of not being able to positively fulfil the requirements that support a talent mindset, may be affected by the environment and the resultant availability and level of engagement of the talent based on environmental factors.

The researcher does not necessarily support the notion that environmental factors will inform a talent mindset. The fact that the environmental factors may impede an organisation from attracting, engaging and retaining talent does not necessarily change the talent mindset of an organisation. The organisation will still have the inherent mindset that talent will drive its competitive advantage regardless of barriers it experiencing to obtaining talent which is fluid in the market.

The dimensions do however appear (face validity) to measure some components of talent mindset but may not necessarily be aimed at extracting the mental models/ attitudes related to talent management. The findings of the study will be discussed next followed by more specific recommendations around the design of instrument and proposed dimensions.

5.5 FINDINGS

The results as analysed in chapter four, led to findings on both research questions pertaining to the reliability and validity of the talent mindset index. These will be addressed below:

- Does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?

The talent mindset index purported to measure talent mindset on nine different dimensions namely executive commitment, alignment, talent acquisition, talent review process, responsibility, resources, culture, results and lastly environment. The study found that although nine dimensions were extracted, items prominently loaded on one factor and the other eight became irrelevant through the examination of the degree to which items loaded on the factors as well as the number of items per factor (one to two items). It has therefore been found that the talent mindset index displays low construct validity in terms of measuring talent mindset using nine different dimensions with the current methodology – the survey does not validly distinguish between the nine proposed dimensions.

As discussed in the previous section, the proposed theoretical subscales within the instrument do represent areas where it is critical to drive change towards a talent mindset (with exception of environmental factors) and to some extent also reflect the degree of successful change in a mindset through the review of instilled practices. In interpreting the results of this study, it is important to consider the following. Firstly, the number of factors identified may have been pre-disadvantaged based on the fact that very few items were designed to represent each dimension (as few as two on some dimensions).

Secondly, research strongly indicates that the leaders of an organisation need to create a talent mindset and culture that is sustainable (Cheese *et al*, 2008) and that management must be onboard with the fact that talent management strategies are important and that talent can drive the competitive advantage of the organisation (Cheese *et al*, 2008; Lockwood, 2006). If this is the case, then executive commitment becomes a key indicator of whether a positive mindset towards talent will become entrenched in the organisation over time. The argument for the degree of executive commitment being an indicator of talent mindset thus becomes substantial and one should reconsider what items can be generated to measure executive commitment in the context of talent. This argument can be supported for a number of the proposed dimensions.

The dimensions of the index are further supported by the literature of The Human Capital Institute (2007) which listed four points on how to instil a talent mindset in an organisation. Firstly it would start with the top executive leadership who would need to have a talent mindset and filter this down into the organisation. This mindset would become ingrained in the organisation when every opportunity is utilised to plant the seed of the required talent mindset. The talent review processes would model the required behaviours and guide everyone to follow the correct practices that reflect the mindset and lastly, accountabilities will be assigned that are directly aligned to talent. This will entail that consequences exist for those that embrace the talent mindset – rewards and recognition (Human Capital Institute, 2007). This will ensure that talent is treated as crucial to the organisation's success on a daily basis and will reinforce the mindset across the business.

It is however prudent to note that whilst literature speaks of ways how to instil a talent mindset, this instrument was created to measure talent mindset. The manner in which the items are constructed precludes to an already existent mindset. In most cases this is identified through targeting statements around the practices an individual would experience in the organisation (hiring, development, strategic planning). It is of the researcher's opinion that an acknowledgement of existent practices will provide an indication of whether a mindset exists in certain "silos" (e.g. HR) of the organisation which then drives the mindset through practice implementation. It does not however measure if each individual holds this 'mental model' around talent and thus supports the associated practices.

It is also of the researcher's opinion that the last proposed scale, reflecting the impact on the environment on the movement of talent is not so much a reflection of an organisation's talent mindset, as it is a reflection of the barriers experienced by organisations (and specific countries as a whole) to attract and retain key talent within their mindset towards talent.

A key recommendation in the review of the index would be to assess the design of the questionnaire in relation to purpose i.e. purpose can be focused on (a) is there a talent mindset throughout the organisation? (e.g. I believe that if an organisation has talent seated in the critical positions, it will achieve its strategic objectives) or (b) Are there existing talent practices that support the notion of an existing talent mindset being entrenched in the organisation (e.g. the organisation has a strong succession plan with at least two qualified prospects in place for each critical position) or (c) Is there a culture of talent multiplication where practices have been held

and behaviours been driven accordingly, over time? (E.g. Rich talent pools are in place and the organisation is still willing to hire new talent if it spots it, regardless of whether a position exists). Not only may the targeted dimensions change, but the content and number of items, as well as manner in which they are phrased will also change.

- Is the talent mindset index reliable?

  The instrument was tested for internal consistency (split half) based on the fact that this was a once off study with one sample of respondents. More specifically the items were tested to establish their inter-item correlations. Cronbach's coefficient alpha was utilised to establish the reliability of the instrument, taking into consideration the number of valid items and it was found that a high degree of reliability existed with 30 items (.954). The reliability was also determined for each of the different theoretical subscales proposed by the instrument and it was found that the reliability was satisfactory (above .7) for most but three of the scales, namely alignment, talent acquisition and results.

In conclusion of the study findings, the instrument is reliable but the construct validity of the instrument as proposed with its nine dimensions is poor as the measurements fail to distinguish between the nine dimensions and thus only one factor can be found. It must be reiterated that it is positive that nine factors were extracted as per the proposed number of factors but the poor loadings on their factors, diminished the construct validity of the instrument.

5.6 LIMITATIONS OF THE STUDY

- A low response rate (N=150) may have restricted the results obtained in the factor analysis even though it as been cited in Gorsuch (Guadoanoli and Velicer. 1988), that a sample of 150 is appropriate for up to 50 variables. The original review of the required sample size to obtain optimal results within factor analysis, indicated that a sample size of N=300 would have been ideal as determined by Tabachnick and Fidell (cited in Pallant, 2001).
- The item distribution within each proposed dimension of the original index, indicated as little as two items designed per each dimension. According to Gorsuch (1983), the requirement is that there is at least a minimum of three items of items listed under each dimension/ factor to increase reliability of the survey and to obtain a better result in factor analysis. The talent

mindset index in some cases had dimensions which were only represented by two or three variables and this was before extraction.

- It was indicated that some of the items were not as easy to comprehend which has two implications. Firstly, the questions may not be structured in a manner where they are easy to understand by the general lay person or the words and phrases utilised may not be familiar. Secondly, the lack of understanding may in itself reflect a lack of a talent mindset in the population as familiarity with the people component of management should enable one to understand the terminology utilised.
- As noted in Hair *et al* (2006), it is important to attempt to gather the highest cases-per-variable ratio in order to reduce the chances of "overfitting the data" i.e. obtaining factors that are not generlisable because they are so specific to the sample.
- The sampling method utilised, namely convenience sampling, poses a limitation based on the fact that the characteristics of the sample could not be controlled to increase the significance of the results obtained. This sample is thus also biased as it does not represent the population accurately due to unwanted influences that could not be controlled.

5.7 RECOMMENDATIONS

In considering the limitations of the study as well as the findings, the following recommendations can be made:

- The literature embodying talent mindset should be reviewed and the number of items proposed within the dimensions should be increased to at least five variables per dimension. This recommendation is based on the methodical recommendation to ensure that at least three to five variables are included to represent each factor (MacCullum *et al* in Fabrigar *et al*, 1999). Ensuring that at least five items are included for each factor will ensure not only a higher face validity but assist with identifying a strong factor structure. In addition, as noted by Garson (2009), increasing the number of items with also further increase the already strong Cronbach's Alpha coefficients found.
- The proposed dimensions should be reviewed within the Talent Mindset Index to establish if the literature does in fact truly advocate these dimensions versus if they accurately represent talent mindset. It must be noted that mindsets are considered to originate from mental models which are deeply ingrained but they also represent hardened attitudes and beliefs that influence

decision-making based on the mental model. It may be better to measure individual attitudes towards the concept of talent management within the organisation to establish whether a positive mindset exists in the organisation. Attitude has been studied more broadly and therefore it may also enable a more accurate depiction of the dimensions required to understand it. Further research is required into the concept of a mindset and how to assess a mindset – can a mindset be created with a number of different factors influencing it and thus the measurement thereof?

- The construction of each of the items should be revised to enhance the understanding of the words/ phrases to enhance the reliability and/or validity of the questionnaire. (Considering that true responses can only be gained if an individual understands the posed questions and their meaning).
- All the items included in the talent mindset index should be revised and replaced with other more appropriate items.
- The 30 items which loaded as one factor should be revised and the instrument will become suitable for use to test talent mindsets of organisations. The secondary purpose of identifying areas in which the organisation will need to focus will however not be summarised by themes of intervention but will need to be broadly addressed either by assessing the specific item responses, or targeting talent mindset as a whole.
- A participative or captive audience should be assessed to obtain a higher response rate for the questionnaire. This could be in the form of general organisational meetings or it could be specific workshops held for business and hosted by HR.
- More advanced statistical analysis can be conducted in the future research conducted around talent mindsets.

5.8 CONCLUSION

Currently, there is a tangible shift in the focus of organisations towards talent management. The focus is not only to increase leadership capability but to increase organisational capacity at all levels, focusing on a drive for sustainable operations. The question really is whether this drive is created by a small group of HR specialists, realising the value that talent can add to the organisation or whether there is truly a talent mindset fostered throughout the organisation that drives its practices.

Employees expect organisations to care for them on a holistic basis, to value them as assets to the organisation and to reward them accordingly. Many employers however still hold a 'replacement mentality' where they believe they can easily find a replacement for an employee, regardless of the value of that employee to the organisation. Other employers focus on a smaller group within the organisation and label these individuals as talent but few employers have achieved a true talent mindset that believes that talent is fostered throughout the organisation and that this talent will drive its competitive advantage.

A compelling force has to exist within an organisation that supports a positive mindset towards talent in order to entrench behaviours that will support talent management practices and ultimately to bind the organisation with a talent culture that drives the attraction, development, retention and engagement of talent at all levels in the organisation.

This study has made a number of contributions specifically to academic literature, considerations for the practice of talent management and lastly, for input into future research.

5.8.1. Talent Mindset index in academic literature

The fact that limited academic literature is available regarding the concept of a talent mindset has provided this study with the opportunity to contribute to the literature for use in Human resources, Industrial psychology and the Business management field.

5.8.2. Talent mindset index in practice

From the literature, it becomes clear that organisations need to understand talent mindset and its dimensions, specifically in relation to the new uncertain environment, in order to truly encapsulate the dynamic nature of talent management and to reap the rewards resulting from this.

An organisation's view regarding the value of its people or its talent reflects externally and will invariably affect its value proposition and brand in the market. This will in turn affect its ability to attract and retain a talented workforce (Lewis *et al,* 2006). The new dynamics of the economic arena and the daunting possibility of an economic meltdown will result in organisations needing to reign in, even more, on every potential area of strength that can sustain it through this period, more specifically its human capital. This can only be achieved by embodying the belief that talent is in fact critical to ensure that the

organisation not only survives but flourishes in times of economic downturn, by treating talent management as a means to an end, rather than the end itself (Cappelli, 2008).

This study is thus significant in validating and determining the factors of the talent mindset index. This will provide insight into updating the talent mindset index which will provide organisations with a framework for enhancing mindsets in order to more effectively attract and retain talent for optimal business performance specifically adapting to the age of uncertainty. The refined talent mindset index will thus prove to be a tool capable of assessing the degree to which the organisation has a positive talent mindset. Organisations that are not mature will need specific indicators in order to initiate a change in talent mindset

5.8.3. Talent Mindset in research contribution

The current tool is limited in its capability of identifying the touch points where change programs will need to be implemented to address negative practices related to poor mindsets regarding talent in organisations. This conclusion is based on the fact that the instrument displayed a low degree of construct validity in relation to the current methodology. The findings will enable further research into the concept of talent mindset and its linkages in an organisation. This study will thus contribute to subsequent research where the refined and validated talent mindset instrument can be utilised to explore relationships with engagement, wellness, safety and other constructs of interest. Finalising this instrument will allow the opportunity for further research into establishing the relationship between talent mindset and business effectiveness.

"When I stand before God at the end of my life, I would hope that I would not have a single bit of talent left, and could say, "I used everything you gave me."

CHAPTER 6: ARTICLE

THE PSYCHOMETRIC PROPERTIES OF A TALENT MINDSET INDEX

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ABSTRACT

The so called 'war for talent' has caught the attention of many organisations as they attempt to gain and maintain a competitive advantage in the new landscape where the 'rules of the game' seem to constantly be changing. Many organisations acknowledge the fact that talent is their most important asset but questionably in some cases, there is no real drive for talent and this brings to fore the question of why? It has been argued that in order to truly enable the management of talent to drive the success of an organisation, it will need to embody a talent mindset. This study investigates the psychometric properties of a talent mindset index within a South African aviation organisation. If talent mindset is truly a key determinant of an organisation's capability to optimise talent for business performance, a valid and reliable instrument will be required to establish the degree that an organisation's mindset is in favour of talent, if to any. The index was administered to 150 employees and an exploratory factor analysis as well as an analysis of the reliability of the instrument was conducted. The findings indicated that only one factor exists, namely the construct of talent mindset itself. The extracted items for this construct are reliable. It is recommended that either more items are developed to identify constructs or alternatively that the theory of mental models and mindsets are revisited to identify a better measure of a talent mindset, which originates from mental models and naturally evolve into attitudes. The implication for managers is that talent mindset is an essential element to drive business success as depicted through literature review but that the different elements (if any) of this mindset have not been identified in order to define intervention areas.

KEYWORDS

Talent Management, talent mindset, exploratory factor analysis, mental models, culture, index, survey, South Africa

6.1. INTRODUCTION

The 'war for talent' has caught the attention of many organisations as they attempt to gain and maintain a competitive advantage in the new landscape where the 'rules of the game' seem to be changing constantly. Globalisation and the saturation of markets has created a strong need to find people who can add value and provide organisations with the edge they need to be successful and differentiate themselves from their competitors (Chartered Institute of Personnel and Development, 2006; Cheese, Thomas & Craig, 2008; Lockwood, 2006). Mckinsey's studies amplified the demand placed for talent on a global scale and the repercussion of this demand on business effectiveness. (Gurthridge, Komm & Lawson, 2008; Lockwood, 2006). Many organisations acknowledge the fact that talent is their most important asset but questionably in some cases, there is no real drive for talent and this brings to fore the question of why?

The popular 'war for talent' (Toten, 2008, Frank, Taylor, & Talentkeepers; Chartered Institute of Personnel and Development (CIPD), 2006) is fuelled by factors such as globalisation and increasing competitiveness across markets, new business growth lifecycles, the aging workforce, falling educational levels, a decline in younger workers entering, and the quality of the potential workforce in the developing countries (Ashton & Morton, 2005; CIPD, 2006; Deloitte Consulting, 2006; Gurthridge *et al*, 2008; Ready & Conger, 2007). The 'talent squeeze' is perpetuated by the mobility of talent and the complexity associated with it which is created by factors such as the changing attitudes of workers, the increase of knowledge workers, the relaxed trade barriers as well as enhanced communication across the borders (Ashton & Morton ,2005; Cooper, 2007; Tucker, Kao & Verma, 2006).

In the South African market, it is acknowledged that the country is a developing nation and that the skills profile in terms of age is inverted to the developed nations. African countries in fact have a

large influx of the younger generations entering the work place; however their skill sets leave much to be desired. The concern is that these younger employees are generally lacking the capabilities to perform effectively in the workplace as 'talent' due to a broad lack of skills in the market. In addition to this, the impact of the recession on the South African market has been such that organisations have retrenched without consideration for strategic identification of talent that can drive competitive advantage into the future. This is indicative of the potential lack of a talent mindset. The skilled sector of the South African workforce is also under threat based on the need of the developed countries such as Australia and the United States to attract talent from foreign nations based on their own skill shortages. The so called 'brain drain' of South Africa has become critical with thousands of highly skilled and talented individuals leaving the country for 'greener pastures' (The South Africa Migration Project, 2000). South African organisations therefore have a stronger mandate to ensure that their mindset towards talent drives the effective attraction, development, engagement and retention of talent. The development and usage of a talent mindset index will hopefully result in organisations taking a proactive approach in building their competitive advantage which will uplift the South African economy in its competition against global markets.

In revisiting the question of 'why' organisations are not able to win in the talent war, research highlights the needs for organisations to embody a talent mindset. Ridderstrale and Nordstrom (cited in Cheese *et al,* 2008) comment that "after a relentless pursuit of talent, many are now stating that there was a war for talent, and that talent won." The key in entering into the battle for talent again may lie in addressing the requirement of a talent mindset at the core of organisations. Mindsets are powerful in shaping cultural assumptions and behaviours, as well as the outcomes of the developed practices. If organisations do not have the correct mindset towards talent, they already have a disadvantage in their pursuit of this valuable asset (Ready & Conger, 2007). Organisation's world-wide are focusing on optimising their talent management practices, in the hope that this will provide them with the ability to engage talent in the workplace. (CIPD, 2006). Many organisations are failing, even in the midst of attempting to improve their practices and are confused as to where things are 'going wrong'.

The mindset of an organisation towards talent, will affect the manner in which talent is responded to as well as how decisions are made regarding talent. If an organisation has a mindset that talent is considered as crucial to business success, one can assume that this mental attitude will result in investing a large amount of effort into retaining talent and that there would be practices to reinforce

the mindset. This mindset will also drive the ensuing behaviours of the managers within the organisation towards talent.

The study of talent mindsets would be valuable in providing organisations with the insight they need to solve their talent dilemmas. To date, no instrument has been statistically analysed in South Africa to determine the talent mindset of an organisation.

The purpose of this study will thus be to establish the psychometric properties of a talent mindset index. The contribution to a tool for measuring mindset will be invaluable in adding more knowledge to empower organisations on how to become 'talent powered organisations'. If an organisation can obtain an index against which to benchmark its talent mindset, it would be able to take remedial actions to transform this into a positive talent mindset, resulting in a more engaged and productive workforce. The instrument will also assist in targeting and prioritizing specific interventions required, in order to improve the mindset of an organisation towards its talent.

The researcher notes that published literature appears to be marginally focussed on the deep-seated concept of talent mindset, but is extensively based on talent practices as is noted with the study by Lewis and Heckman (2006).

The research objective is thus to answer the following research questions

- Does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?
- Is the talent mindset index reliable?

This research will provide further impetus for exploring talent mindset and its link to variables affecting business success. The determination of talent mindset will significantly influence how organisations approach the war for talent and the quest to build human capability within an organisation. This study will provide researchers with the opportunity to utilise a tested instrument to further explore the impact of talent mindsets on an organisation and its employees. Currently, there is limited research on talent mindset as a construct and this research will therefore add more to the knowledge available on the topic.

The remainder of this article will be structured as follows: firstly, the conceptual framework surrounding the concept of a talent mindset as well as talent management as found in practice is

explored. Secondly, the research methodology is provided and the methods for data analysis are described. Next, the findings are discussed in light of the preliminary analysis, factor analysis as well as the review of the reliability coefficients. The article is concluded with recommendations in light of the findings, a review of the limitations of the study as well as proposed further research.

6.2. CONCEPTUAL FRAMEWORK

This section provides an overview of the literature related to talent management in terms of its mental models, specific practices, talent culture and importantly, talent mindsets. The factors contributing to the talent war are also briefly examined. Lastly, the influence of organisational leadership on talent management and more appropriately talent mindset is examined.

The premise that people are an organisation's most important asset is well known, yet organisations struggle to retain their talent and some do not even comprehend the answer to the question of 'What is talent?'. If the premise is well known and most organisations have implemented talent management practices, then why do organisations still not show the benefits realisation? Many claim that talent mindset or the lack of a talent mindset is to blame but what is a talent mindset and how does an organisation develop one to ensure that it becomes the employer of choice of employees of choice. This concept will briefly be explored.

The Human Capital Institute, amongst others (Morton, 2008) refers to talent mindset as the enduring belief that talent is critical to an organisation's competitive advantage, with benefits to both the individual and the organisation. Mindset in itself is defined as "a state of mind that affects an individual's attitude to events and the ability to make decisions" (Prior, 2009). The Oxford dictionary defines mindset as "a set of attitudes or fixed ideas that somebody has and that are often difficult to change" (Oxford University Press, 2001). Literature which refers to talent mindset rarely defines the concept but does refer to the criticalness of establishing a talent mindset. (Creelman, 2004; Deloitte Consulting, 2006).

Based upon the previously cited definitions, it can be surmised that mindset is a frame of reference and powerful mental attitude created by an individual through which reality is perceived and which therefore affects the decisions making process. It can be seen from these definitions that mindset

would be a strong driver which will determine the manner in which an individual will interpret and respond to situations or his/ her environment. More specifically, it relates to the underlying mental models which inform and transform into hardened beliefs which can be seen as mindsets.

Mental models have been referred to by many as assumptions and generalisations about external reality which are formed by individuals (Chinastaff, 2009; Senge cited in Spicer, 1998; Blackman & Lee-Kelley, 2006). Literature shows that mindsets are in fact based on mental models which have been reinforced over time by their consistent and successful utilisation. These mindsets are referred to as "hardened attitudes about the value and effectiveness of the paradigms and mental models" (Duffy, 2009). Duffy (2009) provides a framework for understanding the relationship between paradigms, mental models, mindsets and behaviours. This framework denotes mental models and paradigms as reflecting a way of thinking, whereas mindsets reflect beliefs and, behaviours reflect the actual actions taken, the 'doing'.

"Given a dominant paradigm, its related mental models, and the mindsets supporting the paradigm and mental models, individuals, groups and entire [organisational systems]…begin to devise strategies for how to behave within the dominant paradigms and about how to implement effectively their chosen mental models" (Duffy, 2009). Individuals proceed to implement observable behaviours which reflect their chosen strategies. If these behaviours are successful, the paradigms, mental models and mindsets are reinforced. The abovementioned framework can evolve further into understanding culture formation which will be reflected in proven behaviours which are reinforced within the group over time and become the 'way we do things around here'

Figure one demonstrates the framework which was adapted from Duffy (2009).

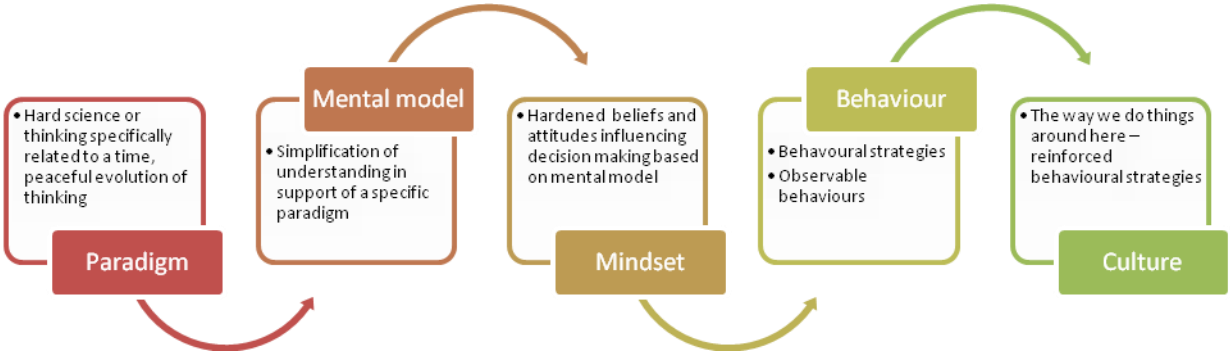

Figure 1: Framework (Duffy, 2009)

It is crucial for organisations to come to the realisation that mental models and mindsets can determine organisational success especially when it is considered that organisational practices rely on human behaviour and the inherent beliefs of individuals (Losey, Meisinger, & Ulrich, 2005). It is also highlighted that mental models are implied by "an organisation's ongoing practices, which creates an interesting link for the rest of this literature review where talent conceptualisations of practices, mindsets and culture are considered (Losey *et al,* 2005).

For the purposes of this study, Talent Mindset will be defined as an organisation's mental attitude or state of mind towards talent and the significance of talent in achieving a competitive advantage. If the mindset towards talent is that it is crucial to business success, one can assume that this mental attitude will result in the organisation investing a large amount of effort into building talent in the organisation and that there would be resulting practices which embody the mindset. An indication of how the differences in mindset could be perceived is reflected in table one below.

Table 1
Old and New Mindsets (Michaels, Handfield-Jones & Axelrod, 2001)

Old Mindset About People	New Talent Mindset
A vague notion that "people are our most important asset"	A deep conviction that better talent leads to better corporate performance
HR is responsible for people management	All managers are accountable for strengthening their talent pool
We have a two-day succession planning exercise once a year	Talent management is a central part of how we run the company
I work with the people I inherit	I take bold actions to build the talent pool I need

An organisation with a talent mindset will support talent management to the level where the people with the capability to think forward and create inventive solutions to problems that do not even exist yet will be attracted to the organisation and be retained. People with the ability to perform strongly and consistently will also become a core workforce that can work like a well-oiled machine. The possibilities are endless; an organisation with the required positive talent mindset can develop the correct practices required in alignment with the needs of the business. “There is a need to change the mindset before the technical “solution” can work (Toten, 2008).

According to Gurthridge *et al* (2008) “passion must start at the top and infuse the corporate culture; otherwise, talent management processes can easily deteriorate into bureaucratic routines”. Culture and mindset are closely related or as cited in the Human Capital Institute (2006) by Schein, “culture and mindsets are inextricably intertwined”. Hadburg (cited In Cheese *et al*, 2008) describes the effects of culture appropriately for the understanding of this research. “It affects the way people work together and how a decision gets made, and is reflected in policies and procedures. It is reinforced through the evolution of social networks as well as formal structures, and it manifests itself both tacitly, through assumptions and visibly, though artefacts and values”. “We consistently see that top-performing companies instil the mind-set and culture needed to manage talent effectively” (own emphasis added). (Gurthridge *et al*, 2008).

The framework of mindsets, mental models and culture have been provided and considered in relation to talent but how is talent defined? Talent is considered as those people who can add value to the organisation through the application of their skills, abilities and knowledge to the strategic

direction of the organisation (Duttagupta, 2008). It is any employee with the ability to impact the organisation positively now and in the future, with the ability to add value (Morton, 2004). Having the right match between a person with talent and a role in an organisation would therefore be the key to excellent organisational performance. The top talent in an organisation would contribute to the value delivered to the customers in its services and products, thus differentiating the organisation from its competitors. The manner, in which an organisation defines its talent, is however specific to its business requirements and perspectives regarding talent. Organisations will require talent that have the ability to meet the business strategy and as an organisation matures its business strategy will change. It is thus expected that the organisation's definition of talent will also change in alignment with the new strategy. It is for this reason that there is not necessarily a single consistent or concise definition (Ashton & Morton, 2005). "As the drivers change, so will the definitions of talent" - talent is thus viewed as a 'strategic differentiator' to a business (Ashton & Morton, 2008).

The management of talent is a concept that focuses on defining both strategic and tactical practices which empower the spontaneous sharing of human capital asset by its employees. Some researchers would link this to an employee being engaged in the workplace (Cheese *et al*, 2008; Guest, 2009). It is clear that talent management is critical to ensure that an organisation's talent improves operational excellence as well the ability of the organisation to achieve its strategic objectives (Ashton & Morton, 2005). What exactly is talent management then?

Talent Management can be defined in many ways, depending on the context. Essentially the goal of talent management would be to ensure that the right skills are available at the right time and place to meet the strategic objectives of the business. Therefore, it is concerned with the flow of talent through an organisation (Duttagupta, 2008). If talent and its components are practiced from a strategic perspective (linked to business strategy), and these practices are strong, there is evidence that it will lead to a high performance workplace which will drive bottom line results (Cheese *et al*, 2008; Creelman, 2004).

The plight for effective talent management has increased excessively and this became more noticeable after the impending shortage of talent was highlighted by the Mckinsey Consultants in 1998 and termed the "War for Talent". Their study revealed that if organisation wanted to compete effectively in the market they would need to also compete on a global scale to have the best talent (CIPD, 2006, Toten, 2008). In this regard, Talent Management is viewed as a critical source of

competitive advantage for organisations (Cheese *et al*, 2008). A number of reasons were cited such as demographical changes, skills shortages, generational challenges and global impact.

In South Africa, the scarce skills that are available are increasingly mobile and the brain drain in South Africa is a consequence of this mobility. South Africa has been losing its core skills for a number of years and it is a well-known fact that a large proportion of these skills have moved to Australia. Australia has been identified as "one of the world's greediest nations for skilled workers from abroad" and their policies support this successfully (Cheese *et al*, 2008).

The trends of the rest of the world outside of Africa still impact South Africa's own performance in the talent arena as our own skills are attracted to work in dollars and euro's in less crime ridden countries. South Africa and other developing nations are considered prime areas where talent can be hunted for by global counterparts. The CIPD (2006) notes how the USA and Russia are likely to experience problems to attract talent out of their own markets and therefore will increasingly be hunting for talent in the rest of the world. Developing or undeveloped nations do not have a problem with population growth, if fact the demographic profile is inverted with large streams of younger workers entering the workforce (Bramely, 2009). As noted in the previous section, these younger workers generally lack the skills. In addition organisations face another challenge and that is how to manage generational differences in the workforce. This will be discussed next.

In addition to these previously discussed challenges, South Africa also has a deeply empowered labour law system which also gives rise to a strongly unionised environment. This poses a challenge, in that the management of what an organisation defines as 'talent' becomes tainted with legal obligations which may or may not lead to supporting the strategy. In the midst of continuing concerns to balance the workplace in terms of affirmative action initiatives and diversity (Frank *et al*, 2004), organisation's still need to ensure that they have highly skilled talent operating and driving business to the next level.

In certain sectors, the skills simply are not available to meet the demand. Organisations should carry the onus to develop talent in the market but individuals cannot be expected to function optimally based upon a fast-tracking programme alone. The unionised environment continues to place pressure on organisations to recruit without regard to the ability of the individual to optimally meet the demands of the organisation. South African organisations will have to invest more time and energy into talent management if they are to ensure that they retain their current talent and are

able to attract or develop future sources of talent. This will require a strong alteration to the current mindset towards talent. A new mindset towards talent is required in the workplace – "inspired by new leadership, informed by new strategy, supported by new capabilities". (Cheese *et al*, 2008).

This study is aimed at investigating the psychometric properties of the talent mindset index within South Africa. If the instrument is found to be valid and reliable, it would aid organisations to direct interventions to instil a talent mindset and to achieve the advantage it needs to succeed in this ever changing and competitive environment.

The proposed dimensions of the talent mindset index are well supported by the literature. The talent management focus areas as well as indicators that drive successful change appear to provide a good framework within which to review the dimensions.

- Executive Commitment
- Alignment
- Talent Acquisition
- Talent Review Process
- Responsibility
- Resources
- Culture
- Results
- Environmental Factors

As highlighted in the literature, in order to successfully harbour talent which steers organisational success, an organisation needs strong executive commitment recognising the importance of talent to secure and drive its business strategy. It requires a strong degree of alignment between the business strategy and talent practices. The process of acquiring talent should be geared towards a notion that talent should be spotted in the market, regardless of a mandate to fill vacant positions. The process of identifying top talent should be carefully defined, are the A and B the 'talent' of the organisation, or do we view all individuals placed in the right positions at the right time as talent?

The accountability for talent should be clearly defined within the organisation. It is critical to establish the mindset that acknowledges all stakeholders accountable for talent not just human resources. The need to allocate the appropriate resources to the drive for talent management must

also be established. Any initiative is sure to fail if the correct amount of resources is not allocated to drive the success of the initiative. The entrenchment of processes supporting talent results in a long term culture geared towards talent to exist in the organisation. The evidence of a positive talent mindset will be seen in the strategies employed by the organisation as well as various measures of organisational success. The overall symptomatic issue of not being able to positively fulfil the requirements that support a talent mindset, may be affected by the environment and the resultant availability and level of engagement of the talent based on environmental factors.

The researcher does not necessarily support the notion that environmental factors will inform a talent mindset. The fact that the environmental factors may impede an organisation from attracting, engaging and retaining talent does not necessarily change the talent mindset of an organisation. The organisation will still have the inherent mindset that talent will drive its competitive advantage regardless of barriers it experiencing to obtaining talent which is fluid in the market.

6.3. METHODOLOGY

The target population for this study consisted of managers and Human resource practitioners in a South African organisation functioning in the Aviation Industry. A convenience sample was utilised based on the limited number of participants available for the study and the expected low response rate. A convenience sample is a significant limitation for this study based on the fact that the characteristics of the sample could not be controlled to increase the significance of the results obtained. This sample is thus also biased as it does not represent the population accurately due to unwanted influences that could not be controlled.

A survey was utilised to collect the data and was distributed for manual/ online completion to obtain the required responses. Participants were either informed via the executive brief of survey's url address or were requested to complete the printed survey on a voluntary basis. The questionnaire was distributed to approximately 558 managers and human resource staff collectively. A total response rate of 35% was observed of which only 150 responses was deemed suitable for data analysis although the biographic data was captured for 154 respondents. The data collection period was extended from two weeks to two months to attempt to obtain the necessary responses

but this was not considered successful. The respondents were required to provide informed consent either online or by signing an informed consent form.

The characteristics of the sample in relation to its biographical variables are displayed in Table 2, 3, 4 and 5 respectively. From the information displayed in these tables it is evident that 58.4% of the responses came from males. The age group who provided the largest response was the 30 – 39 years old grouping which provided 51.3% of the responses. Both groupings depicting the age of the sample younger than 29 (10.4%) and older than 60 (3.2%) provided the smallest returns. It is evident from the table 5 below that 85 respondents or 56.7% of all respondents have 10 years and longer service in the organisation.

Table 2
Frequency Table of Gender of Obtained Sample

Gender	Frequency	Valid Percent	Cumulative Percent
Male	90	58.4	58.4
Female	64	41.6	100.0
Total	154	100.0	

Table 3
Frequency Table of Age of the Obtained Sample

Age	Frequency	Percent	Cumulative Percent
20-29	16	10.4	10.4
30-39	79	51.3	61.7
40-49	30	19.5	81.2
50-59	24	15.6	96.8
60-69	5	3.2	100.0
Total	154	100.0	

Table 4
Frequency Table of Race of the Obtained Sample

Race	Frequency	Percent	Cumulative Percent
African	30	19.5	19.5
Coloured	17	11.0	30.5
Indian	11	7.1	37.6
White	92	59.7	97.3
Other	4	2.6	100.0
Total	154	100.0	

Table 5
Frequency Table of Years of Service of the Obtained Sample

Years	Frequency	Percent	Cumulative Percent
Less than 6 months	6	4.0	4.0
6mnths – 1 year	9	6.0	10.0
1-2 years	16	10.7	20.7
3-5 years	8	5.3	26.0
6-10 years	26	17.3	43.3
More than 10 yrs	85	56.7	100.0
Total	154	100.0	

Guadoanoli and Velicer (1988), as cited in Gorsuch found that a sample of 150 was appropriate for up to 50 variables for factor analysis. The minimum sampling requirements were thus met in order to conduct exploratory factor analysis. The study was based on a quantitative-descriptive (survey) design. This design was utilised to measure the psychometric properties of this instrument at a single point in time (cross sectional design). A specific focus was placed on attempting to detect if any underlying dimensions exist in the questionnaire which could contribute to the construct validity thereof. This was achieved through the quantitative analysis of the data and the interpretation of the outcomes of that analysis.

The study employed the following statistical methods:

- Descriptive Statistical analysis and item analysis
- Exploratory factor analysis to establish if the nine proposed factors can be distinguished
- Reliability analysis

Quantitative data analysis was utilised based on the premise that the numerical data could be examined and manipulated to make the relevant observations required (Babbie, 2005) in order to establish the psychometric properties of the Talent Mindset Index.

The index itself was constructed by the Human Capital Institute in order to measure talent mindset in industry. It consists of 36 closed ended questions and it purports to measure talent mindset based on the following dimensions:

- Executive Commitment
- Alignment
- Talent Acquisition
- Talent Review Process
- Responsibility
- Resources
- Culture
- Results
- Environmental Factors

This instrument is fairly new and has not yet been tested for it validity and reliability. It has also not been used in any official studies to date. There is thus a gap in knowledge where the psychometric properties of the instrument are unknown. The aim of the research will thus be to investigate the psychometric properties of the instrument in South Africa.

In addition to the talent mindset index, a biographical section has been included consisting of 16 questions. It extracted the a number of biographical variables namely: age, gender, race, qualification, home language, basis of employment, job category, years of working experience in the organisation, average hours of work and intent to remain with the organisation.

As previously mentioned, the Talent Mindset instrument consists of closed questions. These questions are rated on a five point rating scale ranging from Strongly Disagree (1) to Strongly Agree (5).

The questionnaire takes approximately 20 minutes to complete and can be administered either online or through manual completion. The researcher was available to address any questions of the respondents regarding the survey and its content. All information was kept confidential.

For the purposes of this study, the questions were not ordered under the hypothesised dimensions but were left open for exploration through factor analysis. The outcome of factor analysis will be to establish the validity of the items in the instrument by identifying the factors that are represented. A minimum of three items will be required per factor to indicate a reliable measurement (Gorsuch, 1983). This may however be limited by the fact that some of the dimensions are in fact only represented by two or three variables. (See appendix A).

The data was captured into SPSS for statistical analysis. As noted earlier, the statistical methods utilised were descriptive statistical analysis, factor analysis and reliability analysis, all with the intention to establish the psychometric properties. The data was summarised in order to establish if it met the required assumptions where after the appropriate method were selected for the analysis of the underlying dimensions of the survey and the psychometric properties thereof. A brief description will be provided of each utilised method.

Normality of the data was consisted in order to utilise parametric statistical techniques. More specifically the skewness and kurtosis was reviewed. Frequency analysis was also utilised to indicate how many people provided each response and provided insight into the demographic spread of the respondents. In order to test the validity of the index, a focus was maintained on the construct validity of the instrument. Construct validity is “the degree to which the variables that are measured represent the theoretical construct on which they are based, and the degree to which that construct relates to other constructs in the expected manner” (Murphey, 2009). This was statistically determined through establishing the relationship between the items of the scale by means of exploratory factor analysis.

Exploratory factor analysis (EFA) is concerned with assessing the construct validity during the initial development of an instrument. EFA requires a substantive amount of inductive reasoning as the answers are not clear-cut and require interpretation and manipulation from the researcher in light of expert knowledge. More specifically, EFA requires conceptual interpretability; the researcher must be able to retain a factor if it is interpretable in a meaningful manner regardless of the empirical

evidence for retention (Worthington & Whittaker, 2006). In this manner the most meaningful results will be obtained from the procedure.

The procedure of exploratory factor analysis first entailed an analysis of the suitability of the data for analysis through an examination of the Kaiser-Meyer-Olkin (KMO) index. The next step was to extract the factors which represent the construct the most appropriately. A number of tests exist which enable the researcher to judge which are the most relevant factors to retain namely the eigenvalue rule, Scree test and Horn's Parallel analysis. After the relevant factors were selected, the various options for the factor structure were explored in order to select a final factor solution. Thurstone (cited in Fabrigar *et al*, 1999) proposed that the solution with the best simple structure would be the most easily interpretable, psychologically meaningful and replicable.

In order to assess the reliability of the instrument, Cronbach's alpha coefficient was utilised as the measure of internal consistency. The next section will provide an overview of the findings of the study.

6.4. FINDINGS

This survey was targeted at managerial and human resources staff under the premise that HR supports a talent mindset, whilst Line management drives it. The survey was thus distributed to approximately 558 managers and employees in the human resources field to be completed online. The online analysis of responses indicated that only 192 employees participated, of which 36 did not complete the survey in totality. The total response rate can thus be calculated at 35%. Unfortunately only 28% of the responses were completed in totality to be utilised within this study (n=150). The response rate however reflected the minimum required response to be able to proceed with a factor analysis.

Further descriptive analysis of the data is detailed in Table six and provides an overview of the number of response, missing data, measures of central tendency and dispersion, including measures of normality. Of particular importance are the indicators of distribution which assess normality which is a prerequisite for conducting parametric statistical techniques (Pallant, 2005) - including factor analysis. As noted previously, a non-significant result (>0.5) indicates normality. In

analysing skewness and kurtosis, and for small samples, measures of between -2.5 and +2.5 reflect normality (O'Neil, 2004).

Table 6
Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TMI1	150	3.05	1.143	-.065	.198	-.740	.394
TMI2	150	2.92	1.071	-.071	.198	-.870	.394
TMI3	150	2.35	.977	.551	.198	-.170	.394
TMI4	150	2.17	.910	.622	.198	-.033	.394
TMI5	150	2.12	.874	.802	.198	.773	.394
TMI6	150	2.37	.930	.473	.198	-.403	.394
TMI7	150	2.45	.879	.435	.198	-.301	.394
TMI8	150	2.79	1.051	.002	.198	-.949	.394
TMI9	150	2.54	1.053	.452	.198	-.725	.394
TMI10	150	2.47	.925	.673	.198	.171	.394
TMI11	150	2.47	1.014	.248	.198	-.584	.394
TMI12	150	2.27	.960	.640	.198	.095	.394
TMI13	150	2.41	.997	.344	.198	-.601	.394
TMI14	150	2.41	.991	.452	.198	-.355	.394
TMI15	150	2.07	.939	.902	.198	.529	.394
TMI16	150	1.95	.817	.622	.198	-.042	.394
TMI17	150	2.66	1.134	.086	.198	-1.123	.394
TMI18	150	2.43	1.071	.492	.198	-.492	.394
TMI19	150	2.13	.950	.789	.198	.240	.394
TMI20	150	2.11	.942	.760	.198	.033	.394
TMI21	150	2.31	.935	.732	.198	.491	.394
TMI22	150	2.30	.988	.761	.198	.350	.394
TMI23	150	2.19	.965	.888	.198	.831	.394
TMI24	150	2.20	.912	.613	.198	-.062	.394
TMI25	150	2.37	1.052	.446	.198	-.610	.394
TMI26	150	2.31	.991	.510	.198	-.408	.394
TMI27	150	2.56	.923	.003	.198	-.371	.394
TMI28	150	2.83	.965	.205	.198	-.310	.394
TMI29	150	3.30	1.169	-.453	.198	-.659	.394
TMI30	150	2.56	1.020	.393	.198	-.282	.394
TMI31	150	2.31	1.010	.383	.198	-.588	.394
TMI32	150	3.81	1.060	-.736	.198	-.008	.394
TMI33	150	3.57	1.032	-.404	.198	-.595	.394
TMI34	150	3.39	1.067	-.120	.198	-.938	.394
TMI35	150	3.95	1.051	-.749	.198	-.207	.394
TMI36	150	3.77	.958	-.489	.198	-.437	.394
Valid N (listwise)	150						

As can be seen in Table six, the results indicate that there are no measures of skewness or kurtosis that fall out of the range of -2.5 to 2.5, and thus the data for this study has normality. The initial descriptive statistics indicated a suitability to continue with an analysis of the data to establish suitability for exploratory factor analysis.

The findings from the factor analysis will be detailed next. A number of factors are taken into consideration in determining the suitability of the data for factor analysis; this includes sample size, ratio of subjects to items as well as indicators such as the KMO and Bartlett's test of sphericity.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy indicated the adequacy of the data to proceed with Exploratory Factor Analysis. It recorded a value of .854 which is significant. Pallant (2001) indicated that the KMO index should be above 0.6 for a good factor analysis; Field (2000) also notes that the KMO should larger than 0.5 which will indicate that the data is adequate. The result that was obtained is thus satisfactory and indicates suitability of the data for further analysis.

Bartlett's test of sphericity is utilised to establish if the "R-matrix resembles an identity matrix' (Field, 2000), i.e. variables correlate only with themselves. According to Pallant (2005), Bartletts test of sphericity should be significant ($p<.05$) in order for the utilisation of factor analysis in a study. The larger the sample though, the less likely this occurs and therefore this test was not required as the sample is over 150. Bartletts test reflected a figure of .000, which is significant.

The methodological approach indicated that eigenvalues (the total amount of variance explained by a factor) would be utilised as a method to determine which factors would be extracted. The number of variables in the survey are 36 for the talent mindset, which translates into a confidence that the cut off of eigenvalues can be accurately interpreted i.e. the ideal number of factors will be extracted (Costello & Osbourne, 2005). It is also important to note the 'total variance explained' by those extracted values in order to establish with confidence that talent mindset can be explained by these factors and not some other extenuating variables.

Table seven below, reflects that a total of nine factors were extracted for further analysis (reflecting eigenvalues of over 1). The initial analysis reflected a cumulative explained variance of 64.90%, however after the nine factors with eigenvalues over one were extracted, this variance dropped to 53.90%. In other words, the nine extracted factors account for 53.90% of the total explained

variance. It is therefore also worthy to note that at this stage it will be pertinent to retain nine factors in order to explain at least 50% of the variance in the data as detailed by Habing (2003).

Table 7
Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	10.831	30.086	30.086	10.403	28.897	28.897
2	2.739	7.609	37.695	2.271	6.308	35.205
3	1.792	4.977	42.672	1.304	3.623	38.828
4	1.689	4.691	47.364	1.263	3.508	42.336
5	1.499	4.165	51.529	1.106	3.072	45.408
6	1.336	3.712	55.241	.888	2.467	47.875
7	1.299	3.609	58.849	.828	2.301	50.175
8	1.139	3.165	62.014	.731	2.029	52.204
9	1.038	2.883	64.898	.595	1.652	53.856
10	.973	2.702	67.600			
11	.950	2.638	70.238			
12	.883	2.454	72.691			
13	.792	2.200	74.891			
14	.775	2.152	77.043			
15	.753	2.093	79.136			
16	.640	1.779	80.915			
17	.618	1.717	82.631			
18	.576	1.599	84.230			
19	.568	1.578	85.808			
20	.527	1.464	87.272			
21	.509	1.415	88.686			
22	.433	1.204	89.890			
23	.421	1.169	91.059			
24	.374	1.040	92.099			
25	.346	.960	93.059			
26	.332	.921	93.980			
27	.308	.857	94.837			
28	.291	.809	95.646			
29	.263	.732	96.377			
30	.247	.687	97.065			
31	.224	.622	97.687			
32	.211	.586	98.273			
33	.189	.526	98.799			
34	.178	.496	99.294			
35	.136	.377	99.672			
36	.118	.328	100.000			

Extraction Method: Principal Axis Factoring.

The initial analysis indicates that factor one contains a high eigenvalue (10.403) as opposed to the following eight factors which decline from an eigenvalue of 2.271 to 1.106. There is a strong indication that only one factor may exist in this index, however this single factor only accounts for 28.90% of the explained variance in the data set.

Table eight indicates the factor matrix, detailing correlations between items and how items load on each extracted factor. It must be emphasised that in reviewing these results, that a researcher could retain a factor if it is interpretable in a meaningful manner, regardless of the empirical evidence for retention (Worthington & Whittaker, 2006). The factor was also assessed in light of the criteria provided by Stevens (cited in Habing, 2003). More specifically:

"A factor is reliable if it has:

- 3 or more variables with loadings of 0.8 and any *n*
- 4 or more variables with loadings of 0.6 and any *n*
- 10 or more variables with loadings of 0,4 and *n* bigger or equal to 150

A simpler framework for interpretation was also considered as identified by Hair (cited in Garson, 2009), the interpretation of factor loadings will be to accept a factor of 0.6 as high, and those below 0.4 as low.

In assessing the factor matrix provided in Table eight, the following results were identified.

- Factor one contains 13 variables with loadings between 0.4 and 0.6 and then a further 16 variables with loadings ranging from 0.6 to 0.732 and thus represents a reliable factor
- Factor two contains only three variables over 0.6 and two over 0.5, the number of variables do however not result in the interpretation of a reliable factor.
- Factor five contains only one variable with a loading over 0.4 and therefore this factor is not considered reliable.

Table 8
Factor Matrix

	Factor								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
TMI1	.367	-.158	.438	.016	.435	.042	-.052	-.039	.146
TMI2	.510	-.051	.143	.196	.243	-.100	-.044	-.217	.079
TMI3	.582	-.026	.061	.284	.031	.064	-.160	-.024	.036
TMI4	.615	-.077	.113	.044	.074	.144	-.405	-.035	-.047
TMI5	.627	.081	.176	.031	-.134	-.099	-.162	-.175	-.093
TMI6	.693	-.018	-.100	.201	-.056	.062	-.076	-.186	.015
TMI7	.619	.017	.019	.058	.257	.017	-.218	-.040	.006
TMI8	.479	.068	.173	.370	.091	.093	.017	.128	-.212
TMI9	.445	.036	.100	.337	-.228	.081	-.112	.038	-.125
TMI10	.595	-.182	.293	.131	-.124	-.013	-.001	.078	-.085
TMI11	.528	-.111	-.020	-.268	.117	.239	-.116	.219	-.063
TMI12	.500	-.105	.079	.000	-.056	.196	.045	.157	.182
TMI13	.612	.022	.271	-.211	-.254	.178	.042	-.039	-.106
TMI14	.672	.031	.326	-.288	-.316	.150	.281	-.203	-.073
TMI15	.676	-.073	-.140	-.193	-.056	.085	.031	.209	.067
TMI16	.694	-.094	-.078	-.060	-.222	.019	-.110	.004	.193
TMI17	.620	.185	-.271	-.071	.374	.254	.275	-.216	-.191
TMI18	.652	.201	-.154	-.019	.285	.185	.267	-.060	.028
TMI19	.640	.087	-.257	.039	-.073	-.190	.002	-.324	-.024
TMI20	.507	-.166	-.258	-.166	.236	.122	-.031	.146	-.051
TMI21	.640	-.030	-.305	.187	-.011	-.255	.013	.212	-.077
TMI22	.619	-.069	-.249	.200	-.097	-.132	.113	.103	-.046
TMI23	.691	.072	-.236	-.087	-.189	-.047	.015	-.045	.013
TMI24	.612	.061	.032	-.293	.166	-.396	-.078	.115	-.158
TMI25	.581	-.024	.193	-.354	.161	-.344	.031	.079	.172
TMI26	.732	.029	-.053	-.109	-.061	-.189	-.052	-.027	.075
TMI27	.445	.003	-.048	.202	-.034	-.032	.070	.276	.009
TMI28	.413	.007	.268	-.054	.027	-.067	.185	.043	.139
TMI29	.181	-.006	.189	.332	.030	-.073	.398	.137	.074
TMI30	.460	.160	-.116	-.128	-.163	-.065	-.003	-.097	-.070
TMI31	.579	-.109	-.092	.131	-.146	.096	.123	.048	.249
TMI32	-.021	.603	.139	.146	.060	-.209	.057	-.076	.107
TMI33	.070	.579	.009	-.160	-.120	.166	-.137	.125	.150
TMI34	.026	.746	-.151	.105	.033	.124	-.125	-.013	.292
TMI35	-.025	.626	.105	-.059	.026	.044	-.068	.184	-.223
TMI36	.095	.584	.174	-.002	-.011	-.085	.078	.108	-.150

Extraction Method: Principal Axis Factoring.

a. 9 factors extracted. 16 iterations required.

In summary, factor one is the only reliable factor found in the structure. On account of the literature reviewed and the empirical findings this factor is interpreted to represent Talent Mindset. The poor variable loadings on the other eight factors in the structure, as well as the high number of loadings of 0 indicates that this is the cleanest structure as there are too many indicators that there is in fact only the one factor. Fabrigar *et al* (1999) indicated that "there exists an infinite number of alternative orientations of the factors….that will explain the data equally well". This means that EFA models with more than one factor do not have a unique solution (Fabrigar *et al*, 1999). In this model however, there is only one factor and thus it can be reasoned that only one unique solution will exist. It is in light of this, that the no rotation was completed for this study.

This results in a doubt around the construct validity of the survey's proposed dimensions (in terms of the current methodology) and leads to the conclusion that the only factor that exists within this index is "Talent Mindset".

Reliability is critical for this study as an unreliable instrument cannot be valid. For the purposes of this study the internal consistency of the questionnaire was tested utilising Cronbach's coefficient alpha. This measurement tested the "degree to which each item in a scale correlates with each other item" (Terre Blanche & Durrheim, 1999). An acceptable value of greater than .75 for the Cronbach's Alpha indicates reliability (Terre Blanche *et al*, 1999). Nunnally (cited in Pallant, 2005) purposes a more lenient measure of .7.

Table 9
Overall Reliability Statistics

Cronbach's Alpha	N of Items
.935	30

The overall Cronbach's Alpha of the reviewed talent mindset variables is satisfactory at .935, as reflected in Table nine above. Only 30 items have been identified to reflect the single dimension found, namely Talent Mindset, and were more closely examined for their reliability. It is common to find high reliability coefficients when one factor is retained.

Guilford and Fruchter (1978) states that many of the statistical operations involved in dealing with tests have to do with item analysis. The major goals of item analysis are the improvement of total-score reliability and/or total-score validity, the achievement of better item sequences and better

types of score distributions. Item analysis procedures are focussed on differentiating between better and poorer items.

Table 10 depicts the item total statistics with the reliability coefficient (Cronbach's Alpha) if the item is deleted. Garson (2009) stated that a Cronbach Alpha of 0.70 or higher is considered to be acceptable but also noted that some researchers will consider a Cronbrach Alpha of 0.80 as the cut-off to be considered a 'good scale'. Table indicates a Cronbach Alpha Coefficient of 0.935 which indicates that the TMI is highly reliable, and can consistently measure the items representing a talent mindset. This indicates that the Talent Mindset index has a high level of homogeneity amongst the items used and is capable of consistently reflecting the same underlying constructs. This reliability can be even further improved by adding additional items which accurately represent the construct (Garson, 2009).

In summary, the data set has produced one factor that will subsequently be utilised for comparison with the norm group. A Cronbach Alpha Coefficient of 0.935 has been obtained which indicates high reliability.

Table 10
Item Total Statistics for the TMI

	Mean if Item Deleted	Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TMI1	69.01	286.429	.355	.936
TMI2	69.14	282.376	.498	.934
TMI3	69.71	281.793	.570	.933
TMI4	69.89	282.490	.593	.933
TMI5	69.94	283.010	.601	.933
TMI6	69.69	279.905	.665	.932
TMI7	69.61	282.749	.607	.932
TMI8	69.27	284.022	.461	.934
TMI9	69.52	285.271	.424	.935
TMI10	69.59	282.499	.582	.933
TMI11	69.59	283.048	.509	.934
TMI12	69.79	284.957	.480	.934
TMI13	69.65	280.993	.582	.933
TMI14	69.65	279.705	.627	.932
TMI15	69.99	280.141	.650	.932
TMI16	70.11	282.558	.663	.932
TMI17	69.40	278.322	.577	.933

TMI18	69.63	278.074	.623	.932
TMI19	69.93	281.391	.601	.932
TMI20	69.95	285.145	.485	.934
TMI21	69.75	281.627	.604	.932
TMI22	69.76	280.976	.589	.933
TMI23	69.87	279.400	.655	.932
TMI24	69.86	282.873	.578	.933
TMI25	69.69	280.979	.549	.933
TMI26	69.75	277.291	.702	.931
TMI27	69.50	287.326	.424	.934
TMI28	69.23	287.438	.400	.935
TMI30	69.50	285.460	.434	.934
TMI31	69.75	281.382	.562	.933

An examination of the reliabilities on the 'Theoretical subscales' originally defined in the index indicated that the coefficient ranges from .650 to .822 as shown in table eleven. The results of the theoretical subscales of 'Alignment', 'Talent Acquisition' and 'Results' are the only values that do not comply to the recommendation of a minimum level of .7 by Nunnally (cited in Pallant, 2005) or .75 by Terre Blanche (1999).

The below standard level reliability for the alignment, talent acquisition and results scale confirms the result of the need to either modify or remove some of the items from the questionnaire which occur within these theoretical subscales. A further attribute to the low reliability may be the low number of items developed to define each of these proposed subscales.

Table 11

Reliability of Theoretical Subscales

	Cronbach's Alpha	N of Items
Executive Commitment	0.742	5
Alignment	0.698	2
Talent Acquisition	0.693	3
Talent Review Process	0.822	6
Responsibility	0.784	4
Resources	0.785	3
Culture	0.763	2
Results	0.650	11

Bostwick and Kyte (cited in De Vos, 2002) render the following observation “High reliability does not guarantee valid results, but there can be no valid results without reliability”. Thus these three proposed dimensions further preclude themselves with their low reliability.

6.5. DISCUSSION

The main objective of this study was to determine whether the instrument reflects a true measurement in establishing the mindset of managers and human resource professionals towards talent. To date, no instrument has been statistically analysed within the South African Market to determine the talent mindset within organisations. If the psychometric properties of the instrument translated into indicating that it is both valid and reliable, it would have proved beneficial in targeting and prioritizing specific interventions required for improving the competitive advantage of an organisation in relation to mindset.

This research provides further impetus for exploring talent mindset and its link to variables affecting business success. It may even lead to a change in direction in the approach of studying talent and its related mental models, mindset and attitudes. The determination of the deeper underlying dimensions driving the behaviour towards talent will significantly influence how organisations approach the war for talent and the quest to build human capability within an organisation.

The aim of this study was to investigate the psychometric properties of the talent mindset index. The two research questions posed in this regard are therefore:

- Does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?
- Is the talent mindset index reliable?

The analysed results led to findings on both research questions pertaining to the reliability and validity of the talent mindset index and these will be addressed below:

- To what degree does the talent mindset index have a high degree of construct validity i.e. to what degree does it measure what is purports to measure?

The talent mindset index purported to measure talent mindset on nine different dimensions namely executive commitment, alignment, talent acquisition, talent review process, responsibility, resources, culture, and lastly, results. The study found that although nine dimensions were extracted, items prominently loaded on one factor and the other eight became irrelevant through the examination of the degree to which items loaded on the factors as well as the number of items per factor (one to two items). It has therefore been found that the talent mindset index displays a low degree of construct validity in terms of measuring talent mindset using nine different dimensions – the survey does not validly distinguish between the nine proposed dimensions utilising the current methodology.

As discussed in the previous section, the proposed theoretical subscales within the instrument do represent areas where it is critical to drive change towards a talent mindset and to some extent also reflect the degree of successful change in a mindset through the review of instilled practices. In interpreting the results of this study, it is important to consider the following. Firstly, the number of factors identified may have been pre-disadvantaged based on the fact that very few items were designed to represent each dimension (as few as two on some dimensions).

Secondly, research strongly indicates that the leaders of an organisation need to create a talent mindset and culture that is sustainable (Cheese *et al*, 2008) and that management must be onboard with the fact that talent management strategies are important and that talent can drive the competitive advantage of the organisation (Cheese *et al*, 2008; Lockwood, 2006). If this is the case, then executive commitment becomes a key indicator of whether a positive mindset towards talent will become entrenched in the organisation over time. The argument for the degree of executive commitment being an indicator of talent mindset thus becomes substantial and one should reconsider what items can be generated to measure executive commitment in the context of talent. This argument can be supported for a number of the proposed dimensions.

The dimensions of the index are further supported by the literature of The Human Capital Institute (not dated) which listed four points on how to instil a talent mindset in an organisation. Firstly it would start with the top executive leadership who would need to have a talent mindset and filter this down into the organisation. This mindset would become ingrained in the organisation when every opportunity is utilised to plant the seed of the required talent mindset.

The talent review processes would model the required behaviours and guide everyone to follow the correct practices that reflect the mindset and lastly, accountabilities will be assigned that are directly aligned to talent. This will entail that consequences exist for those that embrace the talent mindset – rewards and recognition (Human Capital Institute, Not dated). This will ensure that talent is treated as crucial to the organisation's success on a daily basis and will reinforce the mindset across the business.

It is however prudent to note that whilst literature speaks of ways how to instil a talent mindset, this instrument was created to measure talent mindset. The manner in which the items are constructed precludes to an already existent mindset which in most cases is identified through targeting statements around the practices an individual would experience in the organisation (hiring, development and strategic planning). It is of the researcher's opinion that an acknowledgement of existent practices will provide an indication of whether a mindset exists in certain "silos" (e.g. HR) of the organisation which then drives the mindset through practice implementation. It does not however measure if each individual holds this 'mental model' around talent and thus supports the associated practices.

A key recommendation in the review of the index would be to assess the design of the questionnaire in relation to purpose i.e. purpose can be focused on a) is there a talent mindset throughout the organisation? (E.g. I believe that if an organisation has talent seated in the critical positions, it will achieve its strategic objectives) Or b) are there existing talent practices that support the notion of an existing talent mindset being entrenched in the organisation (e.g. the organisation has a strong succession plan with at least two qualified prospects in place for each critical position) or c) Is there a culture of talent multiplication where practices have been held and behaviours been driven accordingly, over time? (E.g. Rich talent pools are in place and the organisation is still willing to hire new talent if it spots it, regardless of whether a position exists). Not only may the targeted dimensions change, but the content and number of items, as well as manner in which they are phrased will also change.

- Is the talent mindset index reliable?

  The instrument was tested for internal consistency (split half) based on the fact that this was a once off study with one sample of respondents. More specifically the items were tested to establish their inter-item correlations. Cronbach's coefficient alpha was utilised to establish the reliability of the instrument, taking into consideration the number of valid items and it was found

that a high degree of reliability existed with 30 items (.954). The reliability was also determined for each of the different theoretical subscales proposed by the instrument and it was found that the reliability was satisfactory (above .7) for most but three of the scales, namely alignment, talent acquisition and results.

In summary of the study findings, the instrument is reliable but the construct validity of the instrument as proposed with its nine dimensions is poor as the measurements fail to strongly distinguish between the nine dimensions and thus only one factor can be found. The fact the number of extracted factors correlates with the proposed number of factors is positive, but does not detract from the fact that loadings only occurred strongly on one key factor- talent mindset.

The following limitations are however noted with regard to this study:

- A low response rate (N=150) may have restricted the results obtained in the factor analysis even though it as been cited in Gorsuch (Guadoanoli and Velicer. 1988), that a sample of 150 is appropriate for up to 50 variables. The original review of the required sample size to obtain optimal results within factor analysis, indicated that a sample size of N=300 would have been ideal as determined by Tabachnick and Fidell (cited in Pallant, 2001).
- The item distribution within each proposed dimension of the original index, indicated as little as two items designed per each dimension. According to Gorsuch (1983), the requirement is that there are at least a minimum of three items of items listed under each dimension/ factor to increase reliability of the survey and to obtain a better result in factor analysis. The talent mindset index in some cases had dimensions which were only represented by two or three variables and this was before extraction.
- It was indicated that some of the items were not as easy to comprehend which has two implications. Firstly, the questions may not be structured in a manner where they are easy to understand by the general lay person or the words and phrases utilised may not be familiar. Secondly, the lack of understanding may in itself reflect a lack of a talent mindset in the population as familiarity with the people component of management should enable one to understand the terminology utilised.
- As noted in Hair *et al* (2006), it is important to attempt to gather the highest cases-per-variable ratio in order to reduce the chances of “overfitting the data” i.e. obtaining factors that are not generlisable because they are so specific to the sample.

- The sampling method utilised, namely convenience sampling, poses a limitation based on the fact that the characteristics of the sample could not be controlled to increase the significance of the results obtained. This sample is thus also biased as it does not represent the population accurately due to unwanted influences that could not be controlled.

In considering the limitations of the study as well as the findings, the following recommendations can be made:

- The literature embodying talent mindset should be reviewed and the number of items proposed within the dimensions should be increased to at least five variables per dimension. This recommendation is based on the methodical recommendation to ensure that at least three to five variables are included to represent each factor (MacCullum *et al* in Fabrigar *et al*, 1999). Ensuring that at least five items are included for each factor will ensure not only a higher face validity but assist with identifying a strong factor structure.
- The proposed dimensions should be reviewed within the Talent Mindset Index to establish if the literature does in fact truly advocate these dimensions versus if they accurately represent talent mindset. It must be noted that mindsets are considered to originate from mental models which are deeply ingrained but they also represent hardened attitudes and beliefs that influence decision-making based on the mental model. It may be better to measure individual attitudes towards the concept of talent management within the organisation to establish whether a positive mindset exists in the organisation. Attitude has been studied more broadly and therefore it may also enable a more accurate depiction of the dimensions required to understand it. The researcher is however of the opinion that one will find a similar result if dimensions were to be developed on talent attitudes but this should be tested. Further research is required into the concept of a mindset and how to assess a mindset – can a mindset be created with a number of different factors influencing it and thus the measurement thereof?
- The construction of each of the items should be revised to enhance the understanding of the words/ phrases to enhance the reliability of the questionnaire. (Considering that true responses can only be gained if an individual understands the posed questions and their meaning).
- All the items included in the talent mindset index should be revised and replaced with other more appropriate items.
- The 30 items which loaded as one factor should be revised and the instrument will become suitable for use to test talent mindsets of organisations. The secondary purpose of identifying

areas in which the organisation will need to focus will however not be summarised by themes of intervention but will need to be broadly addressed either by assessing the specific item responses, or targeting talent mindset as a whole.

- A participative or captive audience should be accessed to obtain a higher response rate for the questionnaire, this could be in the form of general organisational meetings or it could be specific workshops held for business and hosted by HR.
- More advanced statistical analysis could be employed for future studies.

In conclusion of this study, the talent mindset index's construct validity, in terms of the current methodology, has been found to be low.

It is noteworthy that there is a tangible shift in the focus of organisations towards talent management. The focus is not only to increase leadership capability but to increase organisational capacity at all levels, focusing on a drive for sustainable operations. The question really is whether this drive is created by a small group of HR specialists, realising the value that talent can add to the organisation or whether there is truly a talent mindset fostered throughout the organisation that drives its practices.

Employees expect organisations to care for them on a holistic basis, to value them as assets to the organisation and to reward them accordingly. Many employers however still hold a 'replacement mentality' where they believe they can easily find a replacement for an employee, regardless of the value of that employee to the organisation. Other employers focus on a smaller group within the organisation and label these individuals as talent but few employers have achieved a true talent mindset that believes that talent is fostered throughout the organisation and that this talent will drive its competitive advantage.

A compelling force has to exist within an organisation that supports a positive mindset towards talent in order to entrench behaviours that will support talent management practices and ultimately to bind the organisation with a talent culture that drives the attraction, development, retention and engagement of talent at all levels in the organisation.

This study has made a number of contributions specifically to academic literature, considerations for the practice of talent management and lastly, for input into future research.

a. Talent Mindset index in academic literature

The fact that limited academic literature is available regarding the concept of a talent mindset has provided this study with the opportunity to contribute to the literature for use in Human resources, Industrial psychology and the Business management field.

b. Talent mindset index in practice

From the literature, it becomes clear that organisations need to understand talent mindset and its dimensions, specifically in relation to the new uncertain environment, in order to truly encapsulate the dynamic nature of talent management and to reap the rewards resulting from this.

An organisation's view regarding the value of its people or its talent reflects externally and will invariably affect its value proposition and brand in the market. This will in turn affect its ability to attract and retain a talented workforce (Lewis *et al,* 2006). The new dynamics of the economic arena and the daunting possibility of an economic meltdown will result in organisations needing to reign in, even more, on every potential area of strength that can sustain it through this period, more specifically its human capital. This can only be achieved by embodying the belief that talent is in fact critical to ensure that the organisation not only survives but flourishes in times of economic downturn, by treating talent management as a means to an end, rather than the end itself (Cappelli, 2008).

This study is thus significant in validating and determining the factors of the talent mindset index. This will provide insight into updating the talent mindset index which will provide organisations with a framework for enhancing mindsets in order to more effectively attract and retain talent for optimal business performance specifically adapting to the age of uncertainty. The refined talent mindset index will thus prove to be a tool capable of assessing the degree to which the organisation has a positive talent mindset. Organisations that are not mature will need specific indicators in order to initiate a change in talent mindset

c. Talent Mindset in research contribution

The current tool is limited in its capability of identifying the touch points where change programs will need to be implemented to address negative practices related to poor mindsets regarding talent in

organisations. This conclusion is based on the fact that the instrument displayed a low degree of construct validity in relation to the current methodology. The findings will enable further research into the concept of talent mindset and its linkages in an organisation. This study will thus contribute to subsequent research where the refined and validated talent mindset instrument can be utilised to explore relationships with engagement, wellness, safety and other constructs of interest. Finalising this instrument will allow the opportunity for further research into establishing the relationship between talent mindset and business effectiveness.

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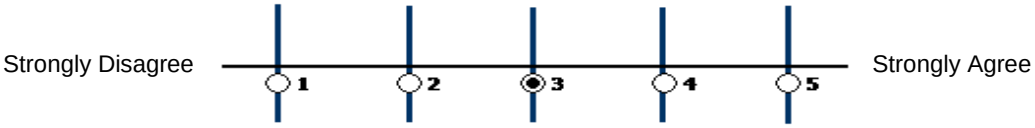
ANNEXURE A: TALENT MINDSET INDEX EXAMPLE (PROVIDED BY: THE HUMAN CAPITAL INSTITUTE, 2007)

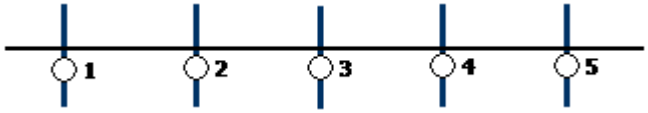
PART 2: Talent Mindset Index

Please select the appropriate option on the continuum ranging from strongly disagree to strongly agree from 1 to 5.

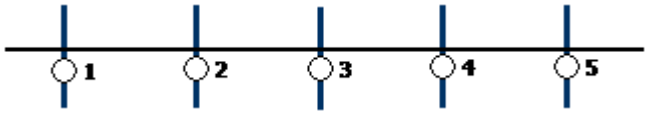


To what degree do you experience that:

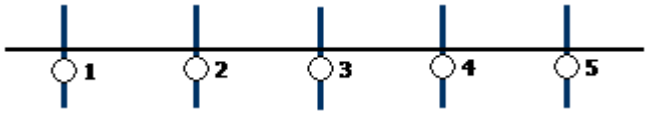
1. Top executives have a deep conviction and abiding belief that better talent results in superior organisational performance



2. The organisation's mission statement, goals, and/or values directly and explicitly support the organisation's commitment to human capital



3. Talent standards are set very high, there is a shared understanding of what these standards are, and the organisation does not compromise these standards in order to make a quick or easy hire



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UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

ANNEXURE B: LETTER OF CONSENT FOR USAGE OF DATA

Faculty: Economic and Management Sciences
University of Pretoria
Pretoria
0001

June 2009

Dear Sir/ Madam

RE: LETTER OF CONSENT: PROPOSED RESEARCH AT SOUTH AFRICAN AIRWAYS FOR FURTHER EDUCATION AND TRAINING

SAA herewith consents to the proposed research, as partial completion of Geraldine Welby-Cooke's studies at the University of Pretoria. The purpose of the research will be to determine the psychometric properties of a Talent Mindset Index. SAA acknowledges that the proposed research relates to her Masters Degree in Human Resource Management and will consist of a Survey Questionnaire that will be completed on a voluntary basis by SAA respective staff members regarding the organisation's talent mindset.

SAA grants authorization for the use of the above information for this purpose, with the full understanding that this will not be to the detriment of the organisation.

Should any additional information be required in this regard, please do not hesitate to contact Martie Daniels on the following numbers:

Office: 011 978 3246

Yours sincerely

Martie Daniels
Talent and Performance manager/ Divisional HR Manager Corporate
SAA Human Resources