



Evaluating the effects of corporate reputation on employee engagement

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

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Abstract

This study explores the previously less researched impact of corporate reputation on employees, more specifically on employee engagement. Employee engagement and corporate reputation are concepts that have been receiving attention in both business and academia alike, especially in view of the economic turmoil of the past decade as both constructs have been shown to affect profits. The study was designed in a way to measure the impact of employees' perceptions of corporate reputation on their engagement with the corporation, while controlling for the state of their psychological contract with the organisation. An online survey of 509 employees from a large South African bank provided the data to which a Structural Equation Model (SEM) emanating from the theoretical background was fitted. The results of the model unequivocally confirmed that corporate reputation perceptions are an important predictor of employee engagement. It was also found that psychological contract breach influences both perceptions of reputation by employees and employee engagement directly. The implication is that corporate reputation can have a strong influence on tangible results through employee engagement.

Keywords

Corporate reputation, employee engagement, psychological contract, SEM

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Declaration

I declare that this research project is my own work.

It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria.

It has not been submitted before for any degree or examination in any other University.

I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Artyom Shirin

7 November 2012





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1 Chapter one: Introduction to the research problem

This chapter provides the background to this research through examination of the current business environment and linking it to the theory of employee engagement and corporate reputation. The research problem that this work is focused on is stated towards the end and research concrete objectives are similarly identified.

1.1 Background

Today's business world is filled with unpredictability. Events move far quicker than ever before, driven by Instantaneous availability of information, globalisation and interdependence of economies (Cummings & Worley, 2009). The businesses environment today is far more difficult to navigate (Trabelsi, 2011) and arguably requires a deeper understanding of factors that can help businesses be sustainable and competitive. A brief examination of current economic conditions below provides a backdrop against which such factors will be examined.

1.1.1 Global economic conditions

To illustrate how the world has been changing in recent years one need only consider the global financial crisis of 2008 which has affected most of the economies in the world, unlike earlier crises of the 20th century. The effect has arguably been the most severe due to globalisation and ever-increasing links between countries and continents (Trabelsi, 2011).

Even though several years have passed since the crisis struck, fast recovery is not yet guaranteed. The risk of default by some of the EU countries leaves the prospect of economic recovery in the near future rather grim, and the "downside risks remain elevated" (International Monetary Fund, 2012, p. 1).



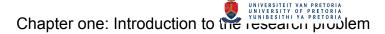
Global growth is expected to slow down and the European Union is expected to remain in a recession. The consensus seems to be that although there are some signs of recovery, it still remains very "fragile" and may be once again disrupted considering low consumer demand and rising energy prices (International Monetary Fund, 2012, p. 4). Indeed, even the global economic powerhouse – China, the world's second largest economy, has been slowing down since 2011 and the government has been forced to cut interest rates (Davis, Back, & Wei, 2012). Worsening external demand for China's exports is likely to result in the slowdown lasting longer going forward than during the actual financial crisis of 2008 (Zhou & Panckhurst, 2012). Seeing that many countries in the world trade with China, it means that it is too early to expect a fast recovery.

Current economic conditions should not be seen as only a threat – for some they may be an opportunity (Kana, 2009): as a result of the faster business pace and increased volatility, businesses *feel the need* to optimise the use of resources in order to remain productive and competitive (Sirisetti, 2012). Since many sources of competitiveness lie within the organisation, employees can arguably be the deciding factor, especially in times of crisis (Hallowell, 1996; Luthans & Peterson, 2002; Migliore & Merz, 2002).

It is suggested, therefore, that factors that can optimise the advantage employees bring to the organisation be examined.

1.1.2 Employee engagement as a source of competitiveness

Advances in modern technology have infinitely increased the complexity of the work environment and, as a result, managers in many industries need highly trained and skilled staff to perform the duties (Markos & Sridevi, 2010). In future, specialisation of knowledge is likely to play an even bigger role



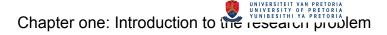


(Meisinger, 2006). It is therefore not surprising that human capital can be said to play a key role in determining the competitive advantage of firms (Baruch, 2006).

Markos and Sridevi (2010) argue that the expectations of the knowledge workers are higher – they are seeking satisfaction, status and autonomy – and as a result managers are faced with the necessity of keeping such employees constantly engaged.

This necessity has far-reaching implications and can explain why employee engagement has been a much researched topic in recent years (Mone, Eisinger, Guggenheim, Price, & Stine, 2011; Robertson & Cooper, 2010; Saks, 2006; Sirisetti, 2012). Indeed, it has been previously argued in the academic literature that employee engagement inevitably impacts business outcomes (Frank, Finnegan, & Taylor, 2004; Richman, 2006) and overall organisational performance (Baumruk, 2004; Harter, Schmidt, & Hayes, 2002; Markos & Sridevi, 2010).

Harter et al. (2002), for example, have evaluated various measures of business performance and found that business units with higher employee engagement realised up to 4% higher profitability that businesses with employee engagement scores in the lowest quartile. Furthermore the authors stated that customer satisfaction and loyalty was affected to such an extent that for large organisations with many business units, high levels of employee engagement translated into "millions of dollars" in benefits (Harter et al., 2002, p. 275). Similarly, Salanova, Agut, and Peiró (2005) also found employee engagement to positively influence customer loyalty as a consequence of heightened performance.





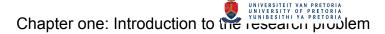
Conversely, there is also evidence that low engagement results in decreases in performance. Meere (2005, as cited in Markos & Sridevi, 2010) found that across a sample of 41 companies the operating and profit margins have reduced in companies with low reported engagement, compared to increases in the same period for companies with high reported engagement.

Ergo, there is no doubt that employees remain a powerful force influencing business success and that engaged employees help companies produce better results. It is asserted that during recession and economic recovery that is to follow, engaged employees may be one of the factors to decide the fate of businesses.

Academic literature links employee engagement and behaviour in general with organisational factors, such as supervisor support and job characteristics (Saks, 2006), higher level factors, such as organisational trust (Lin, 2009), corporate brand (Hardaker & Fill, 2005; Harris & De Chernatony, 2001) and corporate reputation (Friedman, 2009). Amongst those factors corporate reputation has been receiving special attention (Shamma, 2012) in the context of turbulent business environment discussed earlier, particularly since it provides, in its own right, a source of competitive advantage (Boyd, Bergh, & Ketchen, 2010) for organisations. It is therefore appropriate to briefly introduce the nature of the relationship between the two constructs – corporate reputation and employee engagement.

1.1.3 Corporate reputation and Employee engagement

Before discussing how reputation is linked to employee engagement, it is important to note that corporate reputation has been shown to positively affect company performance (Dunbar & Schwalbach, 2000; Eberl & Schwaiger, 2005;



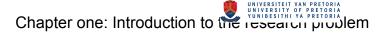


Luchs, Stuebs, & Sun, 2009) providing strategic benefits and increasing likelihood of obtaining business (Walker, 2010).

With reference to the economic turmoil of the last decade, Raithel, Wilczynski, Schloderer, and Schwaiger (2010) found that companies that managed to uphold their reputation after the global financial crisis of 2008 were "rewarded" by investors. Reputation also carries an emotional component which "might hold great potential for additional differentiation in competitive industries and markets" (Raithel et al., 2010, p. 397) and drive financial performance through customer loyalty and word-of-mouth (Walsh, Mitchell, Jackson, & Beatty, 2009) When it comes to employees, previous research found that corporate reputation and employee behaviour are linked. There are two possible scenarios, when:

- Employee behaviour drives corporate reputation (Friedman, 2009; Harris
 & De Chernatony, 2001; Helm, 2011), and
- Corporate reputation affects how employees behave and perform
 (Davies, Chun, Da Silva, & Roper, 2004; Helm, 2011; Men, 2012).

It therefore appears that employee engagement and corporate reputation are locked in a cyclical relationship, one influencing the other. Both directions of the relationship are important in their own right. This paper, however, focuses on the opportunity to explore arguably the less explored impact that perception of corporate reputation by employees has on employee engagement. In the context of turbulent business environment, it is suggested that focusing on reputation will not only bring performance benefits from the customer side, but would also encourage employee engagement, which would lead to an additional impact on corporate performance.





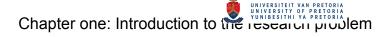
1.1.4 Impact of the relationship with the employer

Employee engagement is also likely to be influenced by the state of the relationship between the employee and the employer. In the context of the relationship between employee engagement and corporate reputation, it is therefore important to consider that relational factors may impact both engagement and reputation.

Factors such as intrinsic employee state and personal characteristics, for example psychological well-being (Robertson & Cooper, 2010) and core self-evaluation (Shorbaji, Messarra, & Karkoulian, 2011) have all been linked with employee engagement. Similarly, Bal, Chiaburu, and Jansen (2010) have found that breach in psychological contract negatively affects work performance and employee citizenship behaviour (OCB) which is linked to employee engagement (D. Robinson, Perryman, & Hayday, 2004) and can be considered to be an outcome thereof. This suggests that engagement may be the psychological link between observed behaviour and its apparent cause, i.e., the break in the relationship between employer and an employee.

Furthermore, violation of the psychological contract has also been shown to influence affective commitment that employees display towards organisations (Helm, 2011; Hemdi & Abdul Rahim, 2011). Affective commitment is a critical component of employee engagement, therefore adding to evidence that psychological contract should be used as a control variable in an explanatory model of employee engagement.

Having reviewed the context that led to this research, it is imperative that a problem statement is formulated in order to provide a clear goal that this research paper is to achieve.





1.2 Problem statement

Given the importance of employee engagement and corporate reputation in their own right as discussed in the previous paragraphs, an empirical model that attempts to explain employee engagement as a function of corporate reputation will be useful for management practitioners. Not only could such a model shed more light on the relationship between the constructs, allowing managers to develop practical ways of influencing employee engagement in order to get better operational results, but it will also advance the relevant theory in the fields of management, human resources and marketing.

The management dilemma at hand is therefore an attempt to investigate the link between employee engagement and perceptions of corporate reputation by the employees and answer the following questions:

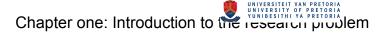
- Do perceptions of corporate reputation affect employee engagement?
- To what extent do promises made by the employer, as portrayed by the psychological contract, affect the relationship between corporate reputation and employee engagement.

In light of the management dilemma outlined above, it is fitting to formulate the research objective and briefly outline the benefits of this research for academia and business alike.

1.3 Research objectives

The main objectives of this research are as follows:

 To investigate the nature of the relationship between perceptions of corporate reputation by company employees and employee engagement, guided by the previous studies on this matter;





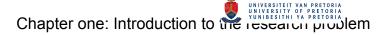
To develop and empirically test the theoretical model of the said relationship using primary data.

1.4 Benefits of research

As mentioned in preceding paragraphs, current economic environment is a force that acts as a disrupter to the *status quo* of most businesses operating in the global economy. Many large businesses have been negatively affected by the financial turmoil and business leaders need to focus their attention on remaining competitive and employee engagement can, amongst other factors, be a useful lever in this quest (Helm, 2011; Markos & Sridevi, 2010; Van Rooy, Whitman, Hart, & Caleo, 2011; Xu & Helena Cooper, 2011).

Similarly, corporate reputation is also a topic of interest for companies, especially since there is evidence that companies with a higher reputation have a higher chance of success (Luchs et al., 2009; Raithel et al., 2010; Walker, 2010).

Furthermore, businesses have been focusing on corporate governance over the past few decades in light of the fact that companies that are perceived to follow the principles of good governance are more likely to be trusted and as a result attract more investments, especially in emerging markets (Fombrun, 2006; Yu, 2010). Corporate reputation management is now an indispensable part of corporate governance and is included in the King III report on this subject (Institute of Directors in Southern Africa, 2009), providing evidence that reputation does not only affect investment decisions and improve relationships with customers but also helps deliver results through engaged employees that will be of interest to the business circles.





As for the academic body of knowledge, there appears to be a lack of studies that examine the impact of reputation perceptions on the multi-dimensional construct of employee engagement. Based on the search of major online databases, there has been little academic research linking reputation and engagement, although some researchers have linked affective commitment (Helm, 2011) and other constructs which can be considered part of employee engagement. Reputation studied in the context of marketing and employee involvement in building reputation or image in the eyes of customers is widely highlighted (Friedman, 2009; Harris & De Chernatony, 2001).

Further to this no models attempting to relate these concepts in presence of other controlling variables were found, while this paper is written in the premise that relationships with employees may affect perceptions of corporate reputation and ultimately employee engagement.

It is suggested, therefore, that such a model will be of interest to academic fields of managerial psychology, human resources and marketing.

As a result of the above-mentioned, this research was conducted in order to understand some of the factors that drive employee engagement and can help managers create conditions under which employees perform at their best and, consecutively, ensure businesses success amidst turbulent economic conditions.

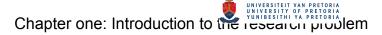


1.5 Structure of research report

The present report is structured in the following manner:

- Chapter 1: "Introduction to the research problem" focuses on the present business context and the benefits of this research
- Chapter 2: "Literature review" discusses the theoretical underpinnings of the constructs at the centre of this study in order to arrive at the hypothetical relationships between them.
- Chapter 3: "Research hypothesis" details the hypotheses pertaining to the relationships between employee engagement and corporate reputation. The hypotheses provide concrete directions of the relationships in a manner that can be tested by the empirical model.
- Chapter 4: "Research methodology" explains the method that was followed to collect primary data, and details the measurement instrument and the analysis technique.
- Chapter 5: "Results" provides a statistical output with explanatory commentary, including descriptive statistics for the sample, scale consistency testing, results of the confirmatory factor analysis and Structural Equation Modelling.
- Chapter 6: "Discussion of results" critically evaluates the findings and elaborates on the results of hypothesis testing.
- Chapter 7: "Conclusions and recommendations" summarises the findings, gives managerial implications and recommendations for future research. It is the final chapter of this research report.

Further to that, a full list of references quoted in this text is provided after chapter seven, while Appendix A – Research instrument provides the survey instrument used to obtain primary data.





1.6 Conclusion

In this chapter, the background to the research problem was reviewed. It was suggested that amid the world economic turmoil it is more important than ever for business managers to focus on performance and competitiveness, and employee engagement and corporate reputation could act as levers for the management in achieving this task.

To this end, it was suggested that the relationship between these two important constructs is investigated, specifically from the point of view of how perceptions of corporate reputation by employees affects employee engagement.

It was further asserted that the corporate reputation and employee engagement may be affected by the standing state of the relationship between the employer and an employee, which can be described by the state of the psychological contract that exists between the two parties in a working relationship.

Lastly, the chapter provided motivation for this research in terms of the benefits for the business and academia, detailed the research problem and objectives and outlined the structure of this research report.

The following chapter focuses on literature review of the constructs pertinent to this study.



2 Chapter two: Literature review

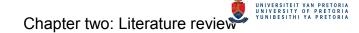
In this chapter the academic literature critical to this study is reviewed in order to provide a perspective on the theoretical constructs that the study is dealing with. The chapter is structured in a logical manner, reviewing first Employee Engagement, followed by Corporate Reputation and the Psychological Contract Breach.

2.1 Employee Engagement

There has been a lot of research into the construct of employee engagement both in academia and business-consulting, yet there seems to be little consensus in the published literature regarding the definition, antecedents and consequences (Markos & Sridevi, 2010; Robertson & Cooper, 2010). Some authors have questioned whether such construct actually exists or if it represents a fad, driven primarily by business consultants (Little & Little, 2006; Macey & Schneider, 2008; Saks, 2006).

Indeed, Macey and Schneider (2008) demonstrate that engagement is such a multi-faceted construct that it is hard to conceptualise and measure, stating that most scales used in the literature simply "do not measure up" to the task. Thus it is imperative to first understand what is meant by engagement in the present study in order to be able to relate results to previous theoretical conceptualisations.

Macey and Schneider (2008) do an excellent job in putting forward some propositions relating to employee engagement based on the previous literature and grouping previous work on engagement into three main areas: engagement as a state, engagement as behaviour and engagement as a dispositional construct (i.e., trait). Each area is reviewed in subsequent paragraphs.





2.1.1 Engagement as a state

Most of the literature on the concept of engagement treats it as some or other psychological or affective state that employees experience while fulfilling roles in the workplace or in personal lives.

Kahn (1992), who is referred to as one of the early writers on engagement (Shorbaji et al., 2011), conceptualised engagement as "psychological presence" of employees at the workplace or "behaviours by which people bring in or leave out their personal selves during their work role performances" (Kahn, 1990, p. 694). The author positioned engagement as an opposite to disengagement with the latter referring to "leaving out of personal selves" (Kahn, 1990, p. 694). Macey and Schneider (2008, p. 12) referred to this view as "involvement of self".

Kahn (1990) further argued that psychological presence is manifested in three different ways, being physically, mentally and intellectually. Moreover for engagement to exist, three psychological conditions must be satisfied: meaningfulness of role or work; safety or lack of fear of negative consequences; psychological availability, or having "resources" to personally engage in a particular task or role (1990, p. 703). May, Gilson, and Harter (2004) built on this work by empirically testing a model which proved to be significant.

Engaged state has been characterised as "attentive" and "absorbed" (Kahn, 1990, p. 698), which is one of the central themes followed by the researchers of psychological well-being and burnout at the workplace (Maslach, Schaufeli, & Leiter, 2001; Schaufeli & Bakker, 2004; Schaufeli, Salanova, González-romá, & Bakker, 2002). According to this view, engagement is seen as the opposite of

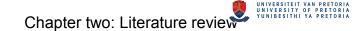


burnout in a two-dimensional continuum across activation (exhaustion *vs.* vigour) and identification (cynicism *vs.* dedication) (Schaufeli et al., 2002).

Macey and Schneider (2008) seem to classify this view as related to *job involvement* due to the similarity in terms, although in the burnout research it is more commonly referred to as *dedication*. In fact, it has been argued that job involvement construct refers primarily to the importance of the job to the employee and lacks affective or loyalty components (Reeve & Smith, 2001). Indeed, comparison of measurement scales for dedication and involvement reveals that the former deals with emotions, such as pride, enthusiasm and inspiration (Salanova et al., 2005; Schaufeli et al., 2002), while the latter revolves around the job's importance in one's life (Reeve & Smith, 2001). Thus job involvement is related to engagement, but should be seen as a consequence of engagement rather than a part thereof (May et al., 2004)

As mentioned above, burnout research links a second component, namely vigour, with the state of engagement. Vigour is seen as the opposite of exhaustion and represents the energy that engaged workers demonstrate (Schaufeli et al., 2002). Together with emotionally-loaded dedication and absorption this energy forms the core of employee engagement in the well-being theories. Macey and Schneider (2008, p. 12) recognise this as one of the critical components of engagement, stating that "... measures of psychological states that are devoid of direct and explicit indicants of affective and energic feeling are not measures of state engagement ...". The authors term this component of engagement as Positive Affectivity (PA).

It is interesting to note that (Rothbard, 2001) viewed the energy associated with engagement as a limited commodity, which gets transferred from one role to the other. This notion stems from the fact that "attention" may be constrained by





factors such as time and stress and given that people fulfil various roles (e.g., work and family), increased engagement in one such role may adversely affect engagement in the other.

The notion of positive affectivity is carried by a number of other authors. Gallup Workplace Audit (GWA) survey equates engagement with job satisfaction (Harter et al., 2002), citing that satisfaction is easier to measure and action. It is suggested, however, that view of engagement as merely satisfaction does not do this construct justice. In fact, even though job satisfaction is conceptually related to positive affect, it should be seen as a consequence of engagement much like job involvement should be (Saks, 2006).

Another view is held by D. Robinson et al. (2004) at the Institute for Employment Studies who are often quoted in literature on employee engagement. They define engagement by borrowing from two concepts – commitment and Organisation Citizenship Behaviour (OCB). Authors argue that amongst various states of commitment, the one related to engagement is the so-called affective commitment as opposed to the structural commitment (concerned only with the transactional exchange of labour for economic return). Thus this view once again brings the *positive affective* component into the definition of engagement, with D. Robinson et al. (2004, p. 9) defining it as "a *positive attitude held by the employee towards the organisation and its values* …".

This view is supported by (Richman, 2006) who virtually equates engagement to commitment. In light of all the other literature on the topic, however, it is suggested that any view that describes engagement as a one-dimensional is limited at best. Shorbaji et al. (2011) further state that most commonly used





conceptualisation sees engagement as emotional and intellectual commitment to the organisation.

In summary, according to the views discussed above, engagement may be seen as a psychological state of self-presence, characterised by attention, dedication and absorption in the job or role, accompanied by feelings of energy, vigour and general positive affective commitment to the job and / or organisation as a whole. Another perspective, namely engagement as behaviour is discussed in the following section.

2.1.2 Engagement as a behaviour

The second component that D. Robinson et al. (2004) brought forward relates to the concept of Organisation Citizenship Behaviour (OCB).

Macey and Schneider (2008) classify engagement as OCB as one of the extrarole behaviours that employees exhibit. Therefore workers who are engaged
with their organisation and their roles will behave in such a way as to *help* their
colleagues and as a result, their organisations achieve the desired outcomes or
goals. OCB theory also suggests that apart from helping behaviour, engaged
employees will be willing to set aside personal interests – behaviour that is
termed "sportsmanship" (D. Robinson et al., 2004, p. 43).

Furthermore, it is argued that engaged employees are willing to go the extra mile and behave in ways that are not directly expected of them, to the benefit of organisation. Such behaviour is referred to as discretionary or extra effort (Frank et al., 2004; Macey & Schneider, 2008; Richman, 2006; Rothbard & Edwards, 2003). Thus behavioural engagement involves atypical actions to the benefit of the organisation, often in order to adapt and innovate (Macey & Schneider, 2008).



It is important to pause here for a moment to contextualise engagement as behaviour. The authors of this paper are inclined to view related behaviours as consequences, rather than antecedents or factors of engagement. A similar view has been suggested by Saks (2006), who viewed OCB as an outcome of engagement.

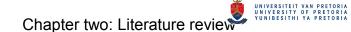
2.1.3 Engagement as a disposition

The last conceptualisation of engagement that should be considered is engagement as a disposition or a trait. According to this view it may be argued that certain people may be prone to experiencing certain dispositions towards engagement, based on personality characteristics, such as conscientiousness and proactive orientation (Macey & Schneider, 2008). As a result, such people may be *inherently* more engaged than others.

Shorbaji et al. (2011, p. 277) have linked a "higher-order personality trait" of core self-evaluation with engagement. Core self-evaluation is a measure of personality traits and encompasses self-esteem, locus of control, generalised self-efficacy, and emotional stability (Judge, Higgins, Thoresen, & Barrick, 1999; Judge, Locke, & Durham, 1997).

Shorbaji et al. (2011) found that a higher score on core-self evaluations is associated with higher employee engagement, thus providing further ground to the conceptualisation of engagement as a disposition. Similarly, Bono and Judge (2003) also provide rationale as they found a positive relationship between core self-evaluation and job satisfaction, with the latter being a consequence of engagement.

While it is important to recognise that employees with higher scores with regard to the core self-evaluation may be more pre-disposed to being engaged, this





disposition is not relevant to the current study, owing to the fact that the study is concerned with the levels of covariance between employee engagement and corporate reputation.

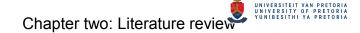
2.1.4 Engagement as a relational construct

There is a fourth way of viewing engagement if its relational component is examined.

D. Robinson et al. (2004, p. ix) have positioned engagement as a "two-way" concept. Authors stated that organisations must look after the relationship between employer and employee in order to nurture engagement. Similarly, Saks (2006) argued that conceptual models presented by Kahn (1990) and Maslach et al. (2001) do not explain why individual response to antecedents of engagement varies. The author proposed that Social Exchange Theory (Cropanzano & Mitchell, 2005) may help in explaining this variation. The theory suggests that employees "feel obliged" to respond to economic and socioemotional resources they receive from the organisation as long as the "rules" of the exchange are not violated. The relational nature of engagement is one of the reasons for including psychological contract violations into the model, which is discussed later in the paper.

2.1.5 Summary

As Robertson and Cooper (2010) point out, most studies in engagement relate to "positive" employee behaviour and identify three common factors: attachment, commitment and organisational citizenship. The common thread in all of the definitions can be described as positive attitude, energy, active commitment and emotional attachment.





It should be noted that engagement is incomplete without the underlying *sense* of purpose, to which both Robertson and Cooper (2010) and (Kahn, 1990) have alluded. The authors argued that if engagement is to be sustainable it is important to concentrate on and evaluate the psychological state of the employees, as those with higher levels of well-being are more likely to engage with their work, colleagues and organisation as a whole.

In summary, it is proposed that for the purposes of this study, employee engagement should mostly be treated as a *psychological state of presence* that is affected by dispositional and relational components.

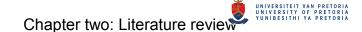
2.2 Corporate Reputation

As mentioned above, the purpose of this study is to measure the impact of corporate reputation on employee engagement. Therefore, corporate reputation is a second construct essential to this study and will now be briefly reviewed.

2.2.1 Understanding corporate reputation

Multiple authors defined corporate reputation in various ways for many years (Caruana, 1997) to the extent that calls were made by academics to tackle the discrepancies and arrive at a common goal (Fombrun & Van Reel, 1997).

Subsequently authors such as Bennett and Kottasz (2000), Gotsi and Wilson (2001), Barnett et al. (2006), Walker (2010) and recently Shamma (2012) have done work to crystallise the body of knowledge and arrive at a comprehensive view of corporate reputation. It is not the intention of this paper to provide a review of the work already conducted in every conceivable detail, but it is deemed appropriate that various views on the nature of reputation emanating from these studies be presented.





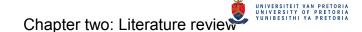
Walker (2010) in his systematic review of literature on corporate reputation has found that the most quoted definition of corporate reputation was provided by Fombrun (1996, p. 72), where he positioned it as follows "corporate reputation is a perceptual representation of a company's past actions and future prospects that describes the firm's overall appeal to all of its key constituents when compared with other leading rivals".

This cornerstone definition in the reputation literature is therefore rooted in perceptions by stakeholders of company actions.

Saxton (1998, p. 396) and Gotsi and Wilson (2001, p. 29) concluded that reputation is a "reflection" or an "evaluation" respectively, by stakeholders, which happens over time.

To the researcher, reflection and evaluation ultimately happen through the individual prism of perception, which leads to an obvious conclusion that perception is a necessary condition for a subsequent evaluation. Barnett et al. (2006) introduced a similar notion into the literature by grouping various definitions of reputation over the years into three clusters of meaning: awareness, assessment and asset. While the authors do not directly specify that assessment is preceded by awareness, the implication is clear from their text that awareness may lead to assessment, and in the case such assessment is positive it may become an asset to the organisation.

As far as the asset nature of the reputation is concerned, it is believed that reputation can also be a liability. For instance, Walker (2010) emphasises that corporate reputation specifically can either be positive or negative and states that it is consistent with the comparative nature of reputation against competition or some standard, as conceptualised by Fombrun (1996) and Wartick (2002) respectively.





Furthermore, there is another important implication following from the reputational clusters as proposed by Barnett et al. (2006): the awareness and assessment definitions are not conflicting, but rather refer to the different stages of reputation formation. It should also be noted, that the definition of Fombrun (1996) treated reputation as an *overall appeal*, which not only refers to the aggregated nature of reputation, but also implies a level of judgement (it is suggested by the researcher that appeal implies conscious or sub-conscious judgement).

In conclusion, it is necessary to point out that the view taken in this study is consistent with the conclusion by Barnett et al. (2006) in that corporate reputation ultimately involves a level of assessment and represents an opinion that stakeholders have of the corporation. As already asserted in the previous paragraphs, this does not invalidate its perceptual aspect thereof, in view of the fact that perception precedes judgement.

Having identified the core nature of reputation construct, it is as important to also discuss the difference between corporate reputation and related constructs of image and identity, so as to avoid any potential confusion in the final definition.

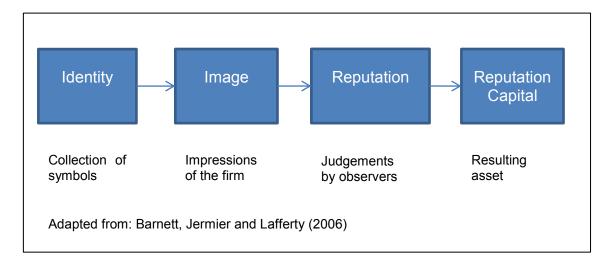
2.2.2 Distinction from Image and identity

Shamma (2012) suggests that corporate image and corporate identity have been seen as components of corporate reputation. Similarly, Wartick (2002) has stated that reputation is a function of image and identity, while Doorley and Garcia (2007 as cited by Shamma, 2012) argued that reputation is a function of image, identity and communication.



However, Barnett et al. (2006) have recommended to rather differentiate between the constructs in view of the fact that it would allow for a more concrete definition, corporate reputation. The authors stated that corporate identity is in fact an enduring collection of symbols, while corporate image comprises the impressions of the firm as seen through the eyes of stakeholders. In this way, corporate image is more akin to the awareness cluster of reputation. Figure 1 below depicts the relationship between identity, image and reputation.

Figure 1 - Corporate identity, image and reputation



O'Callaghan (2007) introduced a similar concept and talked about a pyramid of reputation and makes it clear that identity and image are separate from reputation, but in a way form the pillars thereof. The author emphasises the role of corporate behaviour on reputation, which is consistent with the view of reputation as an aggregate of judgements as adopted above, and states that reputation is dependent not only on image and identity of the corporation, but also on its actions.

Having addressed what reputation is not, it is important to conclude what definition of reputation is used in the context of this study.

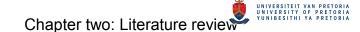


2.2.3 Corporate reputation in the context of this study

Up to this point various literature sources pertaining to the definition of corporate reputation have been reviewed. It is critical, however, to contextualise the definition in order to understand what the study is trying to achieve.

First of all, Fombrun (1996) tightly packed his definition of corporate reputation with meaning, considering that most of the aspects debated by authors subsequently, expanded on the original one. It is therefore not surprising that this definition remained the most often used definition in corporate reputation literature (Walker, 2010). Subsequent to this definition, Barnett et al. (2006) and Walker (2010) have tried to re-write the definition of reputation in light of their synthesis of previous literature. It is suggested that although the discussions leading to the respective definitions have contributed to the deeper understanding of corporate reputation, the definition itself has arguably grown more complex.

In the context of employees, perceptions of the corporation are shaped not only by the aggregate past and future actions of the corporation, but also by the actions of the immediate management (Shamma, 2012). Therefore, reputation as perceived by the employees will be significantly affected by the actions of management and therefore will be less stable than alluded to by Walker (2010). In this regard Walker (2010) points out that reputation does not have to be based on facts and quotes Berger and Luckmann that it may be "socially constructed". In other words, reputation can exist independently from reality, even though it will be influenced and shaped by real events. This is a very important point to consider, since this study is concerned specifically with reputation as perceived by the employees.





In light of this, striving for simplicity and borrowing from Barnett et al. (2006, p. 34), corporate reputation is defined as follows within the context of this paper:

Corporate reputation is an observer's aggregate judgment of a corporation that is shaped through that individual's perceptions of reality.

The researcher believes that this definition captures the essence of reputation in that it is based on a judgement and is thus inherently subjective.

After stating the view on the definition of corporate reputation, it is important to briefly consider the dimensions thereof in order to understand how such a construct can be measured.

2.2.4 Measurement dimensions of corporate reputation

Fombrun (2007) listed the following components of reputation that are typically measured in order to establish reputation perceptions: workplace, citizenship, performance, leadership, innovation, governance and products. Vitezic (2011) measured reputation via similar means, and there are numerous other examples. Such components are commonly measured in terms of performance and are cognitive in nature (Ponzi, Fombrun, & Gardberg, 2011).

However, corporate reputation as a strategic resource is largely unobservable and intangible and thus cognitive performance components listed above are nothing more than proxies or, perhaps, antecedents.

In line with this argument, it has been suggested that reputation as an intangible phenomenon is better perceived through "related tangible concepts" (Bergh, Ketchen, Boyd, & Bergh, 2010, p. 623; Godfrey & Hill, 1995, p. 523).

Fombrun and Pan (2006) followed this approach and explained that corporate reputation may be measured through its consequences, namely:





- good feeling
- admiration and respect,
- trust, and
- positive regard towards the organisation.

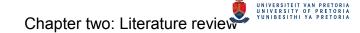
To explain the distinction between criteria and consequences it would suffice to say that the former represent different areas of performance for the company – doing "well" in these areas is likely to influence stakeholders in a positive way, which will result in positive consequences and, ultimately, positive corporate reputation. This dimension of reputation is frequently neglected by researchers or practitioners and is termed "emotional appeal" by Ponzi et al. (2011, p. 18).

For the purposes of this study, a reflective approach is more appropriate, meaning that measured variables are reflections of the underlying construct (Helm, 2005). In this approach corporate reputation is considered a latent construct.

To this end, Ponzi et al. (2011) have developed and tested a short-form reflective measure of reputation called RepTrak[™] which was used for measurement of corporate reputation as is discussed in Chapter four. Furthermore, it is worth noting that organisation trust, which is one of the items of RepTrak[™], has been linked with employee engagement by Lin (2009) who hypothesised that organisation trust mediates the relationship between employee engagement and its antecedents.

2.2.5 Summary

This section of the paper focussed on reviewing the pertinent literature on corporate reputation in order to arrive at an acceptable definition within the





context of this research and identify how amid the myriad dimensions of reputation it can best be measured.

It was found that at the centre of corporate reputation as perceived by employees lie judgements that are based on those perceptions, which do not necessarily reflect real events (Walker, 2010), even though such perceptions would still be an aggregate of corporate actions.

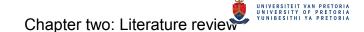
Because of this risk that reputation perception may be skewed in cases when the psychological contract between employer and employee has been breached, it is important to understand what such contracts entail so as to account for its influence in the quest to test the relationship between reputation and employee engagement.

The following section briefly reviews the psychological contract as a construct, in a manner consistent with the goals of this study.

2.3 Psychological contract

The concept of a psychological contract refers to the perceptions regarding the terms of the employment relationship shared between the employer and the employee, which could be conceptualised in terms of mutual promises made between the two parties (S. L. Robinson & Rousseau, 1998).

It is important to note, that S. L. Robinson and Morrison (2000) have found that psychological contract *breach* is different from the feeling of *violation* of the psychological contract. The latter is conceptualised as an outcome of breach, the intensity of which is dependent on the personal interpretation of the breach circumstances and their significance to the individual. For the purposes of this study, the fact of breach is more important as the concept of violation deals only with the emotional outcome of breach.

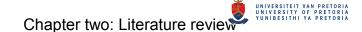


The relational nature of engagement suggests that psychological contract breach could have an impact on the rules of the relationship in terms of the Social Exchange Theory (SET), thus resulting in a lower or higher engagement. Furthermore, it was discussed previously that perceptions of corporate reputation may be affected by actions of management (Shamma, 2012). Consistent with this view, S. L. Robinson and Rousseau (1998) have found that breach of the psychological contract is negatively associated with the trust that the employees feel in their employer. Since trust is a consequence of reputation (Fombrun & Pan, 2006) as discussed in the relevant section above, it is reasonable to suggest that such a breach of contract would be negatively associated with the perception of the entire corporate reputation. When actions of management go against the perceived psychological contract, it becomes highly likely that perceptions of reputation would also change.

Further to this, Bal et al. (2010) have found that breach in psychological contract negatively affects work performance and employee citizenship behaviour, in other words consequences associated with employee engagement. This suggests that engagement may be the psychological link between observed behaviour and its apparent cause, i.e., the break in the relationship between employer and an employee.

Furthermore violation of the psychological contract has also been shown to influence *affective commitment* that employees display towards organisations (Hemdi & Abdul Rahim, 2011), which is a critical component of employee engagement.

All of this adds to evidence, that the psychological contract should play a role in an explanatory model of employee engagement through corporate reputation. If possible breach is not taken into account by the model, corporate reputation





may account for more variation in employee engagement than is the case under a premise that relationships between employee and employer are in good order.

If the objectives set out in chapter one are considered, the detailed discussion of the psychological contract is beyond the scope of this research. The items measuring breach in the psychological contract are presented in the text of Chapter four – which discusses the research methodology adopted in this study.

The following section of this chapter integrates the three constructs into a model, specifying the expected relationships based on the literature review.

2.4 Putting it all together

The main aim of this research was to gauge the impact of corporate reputation perceptions on employee engagement, however, as mentioned previously, this relationship needs to be explored while controlling for the state of the psychological contract.

As mentioned in the introduction to the research problem, previous research found that corporate reputation and employee behaviour are linked. This study examines the less explored direction of the relationship of how corporate reputation affects the engagement of employees.

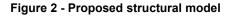
Helm (2011), for example, studied the employee's awareness of their impact on corporate reputation, but the author's model included relationships between the perceptions of corporate reputation and affective commitment. Even though affective commitment is an independent construct, not in the scope of the study, it is closely linked to the positive affectivity component of employee engagement and therefore provides reason to believe that the less studied direction of the relationship between engagement and reputation may hold true in practice.

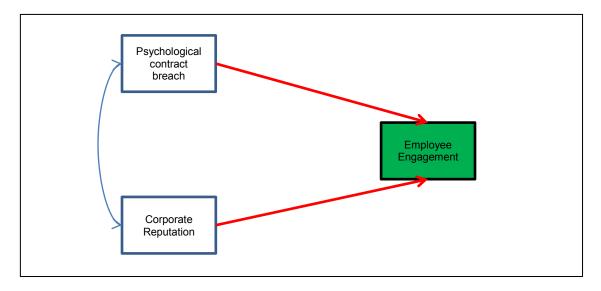


Indeed, Men (2012) in the study of the impact of CEO credibility on employee engagement, found that employee perception of corporate reputation is strongly linked with employee engagement. Furthermore "employees with good feelings towards the company, such as admiration, trust, and respect", i.e., the consequences of reputation as discussed above, are more willing to engage in in organisational activities (Men, 2012, p. 172). Therefore in this research a positive relationship is expected between corporate reputation and employee engagement.

It was also discussed in the literature review above that employee engagement is likely to be influenced by the state of the relationship between the employee and the employer. Bal et al. (2010) have found that breach in psychological contract negatively affects work performance and employee citizenship behaviour (OCB) while violation of the psychological contract has also been shown to influence affective commitment that employees display towards organisations (Helm, 2011; Hemdi & Abdul Rahim, 2011).

Based on the above, the proposed model to be tested is presented in Figure 2.







The figure above graphically illustrates the relationships between the constructs that are to be modelled. Note that the covariance between psychological contract breach and corporate reputation is informed by the theoretical proposition that reputation is not necessarily grounded in fact, but can be affected by situations, such as an unfavourable relationship with management (Shamma, 2012; Walker, 2010).

2.5 Summary of the literature review

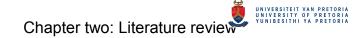
In this chapter the theoretical background to each construct was provided.

Before proceeding, it is imperative to summarise the findings and insights provided by the literature.

First employee engagement construct was discussed. Researcher found employee engagement to be a multi-faceted construct which may be seen from different points of view. For the purposes of this study, employee engagement should mostly be treated as a *psychological state of presence*, characterised by the feeling of positive affectivity towards the organisation.

Next, corporate reputation construct was discussed. It was similarly diverse and plagued by definition issues in the literature, with many authors taking different angles on the matter. For the purposes of this study, corporate reputation was defined as observer's aggregate judgment of a corporation that is shaped through that individual's perceptions of reality (adapted from Barnett et al. (2006)). The implications of this definition are that corporate reputation is a judgement, fundamentally based on individual perceptions, which take individual perceptions and "average" view of the corporation into account.

Lastly, the construct of psychological construct has been introduced. In simple terms, the construct encapsulates the promises made by the employer during





the course of employment relationship. It is expected that a state of psychological contract breach will influence employee engagement and will be negatively correlated with the perceptions of corporate reputation.

The last section of the chapter, proposed a model that is empirically tested in this research. The following chapter provides the summary of the research hypotheses that flow from the model.



3 Chapter three: Research hypotheses

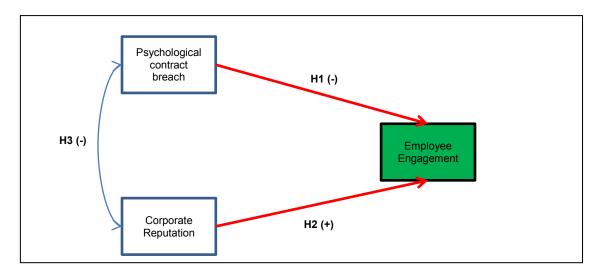
This chapter serves as a summary of the main relationships that are expected between the constructs discussed in the literature review.

Based on the theory, the following hypotheses were formulated:

- H1: Psychological contract breach is negatively related to employee engagement (Bal et al., 2010; Hemdi & Abdul Rahim, 2011)
- **H2**: Employee perceived corporate reputation is positively related with Employee Engagement (Davies et al., 2004; Helm, 2011; Lin, 2009; Men, 2012)
- **H3**: Employee perceived corporate reputation and state of the psychological contract are negatively correlated (Shamma, 2012; Walker, 2010)

The above hypotheses represent relationships in the proposed model as depicted in the figure below.

Figure 3 – Hypotheses in the proposed structural model



The following chapter discusses the research methodology, and goes into detail of how each construct has been measured.



4 Chapter four: Research methodology

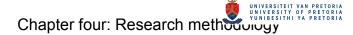
This chapter give insights into the methodology that has been followed to collect, clean and analyse data in order in order to test the hypotheses listed previously. It elaborates on the research design, scope, definition of the population in question, sampling design, survey instrument as well as highlighting potential research limitations.

4.1 Research design

Research design is a plan that outlines how the study is to be conducted, indicating all the critical components that could affect the results (Mouton, 2001). There are two typical approaches to research: qualitative and quantitative, the former deals with new constructs where much exploration is needed, while the latter is more concerned with measuring or describing existing well-defined constructs (Creswell, 1994). This study was conceptualised and executed as <u>quantitative</u> research because it is concerned with constructs that are conceptually and theoretically developed and therefore it was possible to measure them using numerical scales (De Vos, Strydom, Fouche, & Delport, 2002).

Even though the study focused on identifying and measuring relationships between pertinent constructs, it should be classified as a descriptive through *ex post-facto* analysis, meaning that the event or conditions being studied happened prior to the analysis, which tries to reason by comparing the known facts (De Vos et al., 2002)

Furthermore, no causal links were investigated as a result of the descriptive nature of the data, i.e., all constructs were measured simultaneously (Saunders & Lewis, 2012, p. 111). This study was conducted in a cross-sectional time





frame, implying that a snapshot of the researched problem was taken at a point in time (Babbie, 2001), although additional research opportunities that could necessitate a longitudinal study are identified in the end.

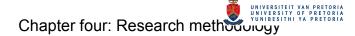
In order to test the theoretical model and test the hypotheses provided in the previous chapter, primary data has been collected through a survey, which is a method that uses a standard questionnaire thereby ensuring that exactly the same observation technique is applied to every respondent (Babbie, 2001).

This method was identified as the most appropriate, considering that this study is concerned with testing relationships between theoretical constructs and thus it was possible to create an instrument based on the literature review that can reasonably measure the constructs in question. Furthermore, the survey method allowed the researcher to collect a large number of responses necessary to estimating a model (Bentler & Chou, 1987; Jackson, 2003) as described in chapter two in a relatively short space of time (Babbie, 2001). Since the study is not exploratory in nature and deals with the constructs that have a rather high degree of scientific crystallisation, the survey method is rather well-suited (Creswell, 1994; De Vos et al., 2002).

4.2 Scope

The scope of the survey was limited to evaluating the theoretical relationship between pre-specified constructs.

The aim was to test for co-variation between constructs and either specify and test a model that fits the theory well, or report that relationships between constructs are insignificant.





4.3 Population definition

For the purposes of this study, the following population was considered: Employees of large profit generating corporations.

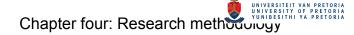
This choice was informed by the fact that this study was contextualised in the turbulent economic environment, and therefore a profit generating enterprise was had to be studied to remain true to the objectives set out in chapter one. Furthermore, it was fitting to use a large organisation owing to the fact that it could provide the diversity of responses needed for the analysis.

4.4 Sampling design

Since it is not feasible to do a census, the data for this study was collected from the employees of one of the four largest retail banks in South Africa. Employees of such a bank fall under the population definition supplied earlier.

A list of employees of a lending business unit of the bank constituted the sampling frame. The business unit is a relatively independent entity within the greater bank, which operates under the bank's brand, but internally is structured as a separate business (profit and loss centre), with little control from the central bank governing body. It is therefore argued that selecting such a business unit is tantamount to selecting any other stand-alone corporate organisation.

In this research a *purposive sampling* technique was utilised. Purposive sampling is a non-probability sampling method, "characterised by the use of judgment and a deliberate effort to obtain representative samples by including presumably typical areas or groups in the sample" (Kerlinger & Lee, 2000, p. 179). In this instance, a company typical of the population was chosen as the first sampling step. Furthermore, the researcher had access to the list of employees of the business in question and all staff on the payroll (excluding





temporary / flexi workers) was invited to participate in the survey. Response profile is presented in chapter five of this work.

Even though the workforce of this division is diverse and the business unit itself can be viewed as a separate company, the fact that only one business unit was considered in the sampling design would impose a limitation on the ability to generalise from the results. These limitations are discussed later in this chapter.

4.5 Ethical considerations

In order to comply with the ethical requirements that a study of this nature needs to follow, responses were obtained voluntarily and without incentive. Respondents were only approached twice: once for the original invitation and one final reminder, to ensure that people did not feel forced to complete the survey. Furthermore, an opportunity to opt out without penalty was afforded to the respondents.

Data collected was anonymous and no personally identifiable information was available in the dataset or the results.

4.6 Survey instrument

The self-completion controlled survey was run online given the fact that most of the employees of the bank in question have email addresses and therefore were able to receive email invitations. Furthermore, the IT of the bank had opened access to the survey URL for everyone in the bank without restriction, to enable employees of all levels to access the survey. Before rolling out the instrument to the entire sample, it was pre-tested with selected employees at a management level. Scale items in the instrument were randomised within the section to prevent similar patterns of response.



The three constructs were measured in terms of the items as suggested by the literature and it is fitting that item selection is now discussed.

4.6.1 Employee engagement

In order to measure employee engagement, it is imperative that factors suggested by Schaufeli and Bakker (2006) (namely Vigour, Dedication and Absorption) and May et al. (2004) (namely Cognitive, Emotional) be utilised. Furthermore, the measurement suggested by Schaufeli and Bakker (2006) was used for primary guidance

Upon detailed examination of the items, it became clear, however, that Cognitive factor is highly similar to absorption and Emotional to dedication. This may seem counter-intuitive at first, however, most of these dimensions were defined in terms of positive affectivity as discussed in the literature review. Therefore it makes sense that there are similarities.

Measurement model is given in Figure 4, with suggested items in Table 1 below.

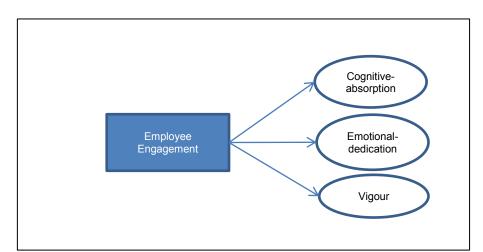


Figure 4 - Measurement model of employee engagement

Adapted from: May, Gilson and Harter (2004) and Schaufeli and Bakker (2006)

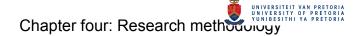


Table 1 - Measurement items of employee engagement

Q No.	Item wording	Original factor	Source	Suggested factor	
1.	Performing my job is so absorbing that I forget about everything else				
2.	I often think about other things when performing my job (-)	Cognitive	May et al. (2004)	Cognitive- Absorption	
3.	I am rarely distracted when performing my job				
4.	Time passes quickly when I perform my job			Absorption	
5.	I feel happy when I am working intensely		Schaufeli		
6.	I am immersed in my work	Absorption	and Bakker		
7.	I get carried away when I am working		(2006)		
8.	I really put my heart into my job		May et al. (2004)	Emotional- Dedication	
9.	I get excited when I perform well on my job				
10.	I often feel emotionally detached from my job (-)	Emotional			
11.	My own feelings are affected by how well I perform my job				
12.	I am enthusiastic about my job		Schaufeli		
13.	My job inspires me	Dedication	and Bakker		
14.	I am proud of the work that I do		(2006)		
15.	At my work, I feel bursting with energy				
16.	At my job, I feel strong and vigorous	Vigour	Schaufeli and Bakker	Vigour	
17.	When I get up in the morning, I feel like going to work	Vigoui	(2006)	Vigoui	

Due to the similarity of some of the items, some of them in the cognitiveabsorption and emotional-dedication may be redundant. However, both scales have been validated by prior research, therefore any item trimming will be discussed in the results chapter to follow when the factor structure is explored and confirmed.

Note that the factor describing the physical element of engagement as suggested by May et al. (2004) was not included in the measurement, due to the fact that Schaufeli and Bakker (2006) measurement approach in terms of positive affectivity was adopted as the core of the construct.



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Items to describe the physical element included the following:

- I exert a lot of energy performing my job
- I stay until the job is done
- I avoid working overtime whenever possible
- I take work home to do
- I avoid working too hard

From discussions with the leadership of the bank and some employees during questionnaire pre-evaluation, it became known that exerting a lot of energy, working overtime whenever possible, and taking work home are not necessarily signs of engagement and may not be seen as a virtue. The culture promotes working smarter so as to avoid working overtime and taking work home. This information added to the decision to focus on the attitudinal component of employee engagement, as in both literature sources they were the most prominent.

4.6.2 Corporate reputation

As discussed in the literature review, corporate reputation is largely unobservable and intangible in nature. In line with this argument, it was suggested that reputation as an intangible phenomenon is better measured through "related tangible concepts" (Bergh et al., 2010, p. 523; Godfrey & Hill, 1995, p. 623). To this end, Fombrun and Pan (2006) explained that corporate reputation may be measured through its consequences, namely good feeling, admiration and respect, trust and positive regard towards the organisation. This dimension of reputation, as discussed in Chapter 2, is termed "emotional appeal" by Ponzi et al. (2011, p. 18).



For the purposes of this study, a reflective approach has been selected, meaning that measured variables are reflections of the underlying construct (Helm, 2005).

In this approach corporate reputation is considered a latent construct. Ponzi et al. (2011) developed and tested a short-form reflective measure of reputation called RepTrak™ which will be used for measurement of corporate reputation. Items are provided in Table 2 below.

Table 2 - Measurement items of corporate reputation

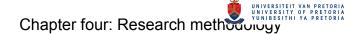
Q No.	Item wording	Source	Latent Factor
18.	[Company] is a company I have a good feeling about		
19.	[Company] is a company that I trust	Ponzi et al.	Corporate
20.	[Company] is a company that I admire and respect	(2011)	Reputation
21.	[Company] has a good overall reputation		

4.6.3 Psychological contract breach

In order to measure psychological contract breach the items developed by S. L. Robinson and Morrison (2000) as depicted in Table 3 were used.

Table 3 - Measurement items of perceived psychological contract breach

Q No.	Item wording	Source	Latent Factor	
22.	Almost all promises made by my employer during recruitment have been kept so far (-)			
23.	I feel that my employer has come through in fulfilling the promises made to me when I was hired (-)			
24.	So far my employer has done an excellent job in fulfilling its promises to me (-)	S. L. Robinson and Morrison (2000)	Psychological Contract Breach	
25.	I have not received everything promised to me in exchange for my contributions	(2000)	Dieacii	
26.	My employer has broken many of its promises to me, even though I've upheld my side of the deal			





Furthermore, as discussed in the literature review, the fact of breach is different from the resulting feeling of emotional violation. There is thus no need to measure the latter to achieve the goals of this study.

4.6.4 Choice of rating scale

Items pertaining to the constructs listed above were previously measured on either a 7-point or 5-point agreement or frequency scale (May et al., 2004; Schaufeli & Bakker, 2006).

However, recently there has been evidence and suggestions that globally respondents have become more used to measurement scales with more points (such as a ten-point) and that conventional wisdom of "the less points, the better" no longer applies. Furthermore, it has been demonstrated that "more scale points ... will result in greater ability to identify important relationships, higher validity for constructs, and better hypothesis tests ..." (Coelho & Esteves, 2007, p. 336).

Based on this notion all the items in the survey were measured on a ten-point interval agreement scale (highly disagree to highly agree).

4.7 The unit of analysis

One of the important steps in designing a research project involves identifying the *unit of analysis*, which is the object of the researcher's attention (Babbie, 2001). In this case the unit of analysis is the *employee* of the organisation in question. The data was collected at an individual employee level, however employees were not analysed and reported on as individuals. Only relationships stemming from aggregated data was evaluated as reported in chapter five of this work.



4.8 Analysis

The data was analysed using SAS System 9.2 for descriptive statistics and using LISREL 8.72 to test the structural equation model (SEM) as follows:

Step 1: Data was cleaned and incomplete responses were removed. Demographic profile of respondents was constructed, using key variables such as gender, organisational level, language, *etc*. This analysis was done to describe the sample in order to pick up on any deviations from the expected distribution. The results are presented in section 5.2.1("Demographics").

Step 2: Descriptive statistics were calculated for each of the scale items. Means, standard deviation, skewness, kurtosis were reported. These results are presented in section 5.2.2 ("Basic univariate analysis of scale items").

Step 3: Frequency distributions were constructed for scale items. The distribution was tested for normality in order to inform the choice of further analysis. The Kolmogorov-Smirnov statistic was used to evaluate normality. These results are presented in section 5.2.3 ("Distribution of scale items and normality testing").

Step 4: Internal consistency of scales was evaluated using Chronbach's alpha. These results are presented in section 5.3 ("Scale consistency and validity").

Step 5: The last step of analysis was to fit measurement and structural models to the data. Structural Model was specified in LISREL in accordance with the hypotheses. Results of the structural model fit are discussed in chapter five, section 5.4, while model specification as well as evaluation criteria are discussed in the following section.



4.8.1 Model specification

In structural equation modelling, the kind of model that does not specify directional relationships between constructs by only taking into account the factor loading equations is called a measurement model. The procedure of estimation of such a model is also called Confirmatory Factor Analysis (CFA) as it allows the researcher to specify the theorised factor structure first (*a priori*) and then fit the model to the data, thereby confirming or disproving the theoretical expectations.

In order to estimate the model as specified in chapter two, the estimation procedure was executed twice — first level one measurement model of employee engagement was estimated and factor scores calculated for latent variables Emotional Dedication, Cognitive Absorption and Vigour. Such latent variable scores are constructed in such a way that they "satisfy the same relationships as the latent variables themselves" (Jöreskog, 2000, p. 1). This allows the researcher to use them in the second level model, where each component of employee engagement loads onto the employee engagement itself. As such, the latent variable scores were used as manifest variables to the second-level construct employee engagement, in a broader model with Corporate Reputation and Psychological Contract Breach latent variables.

In order to interpret the model, it is necessary to consider how such a model is specified in SEM theory. Consider the following sets of linear equations (Jöreskog, Sörbom, Du Toit, & Du Toit, 1999, p. 5):

$$\eta_i = \alpha + B\eta_i + \Gamma\xi_i + \zeta_i$$

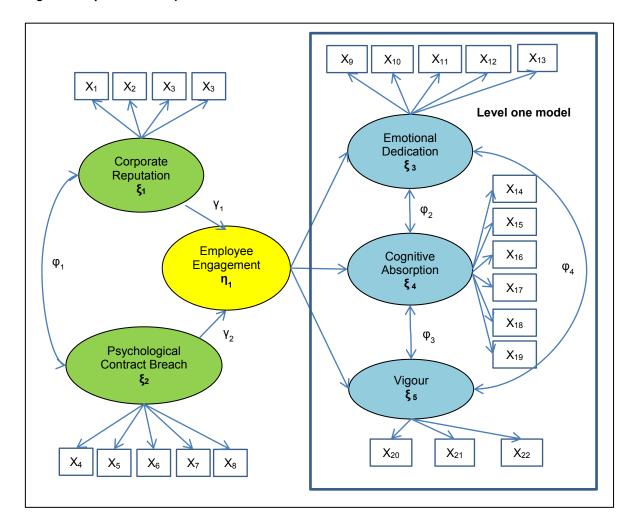
$$y_i = \tau_x + \Lambda_x \eta_i + \varepsilon_i$$

$$x_i = \tau_y + \Lambda_y \xi_i + \delta_i$$



In model specification eta (η_i) parameters refer to *endogenous* latent variables (dependent), while Ksi (ξ_i) represents *exogenous* (independent) variables. Similarly, Y's stand for endogenous manifests and X's for exogenous manifests respectively. Factor loadings λ are not represented on the diagram, but their presence is implied. Similarly, Zeta, epsilon and delta variables which represent the error terms are also not shown in the diagram for simplification. Vectors alpha and tau represent the intercept terms in a general model (Jöreskog, 2000). The summarised model specification (including both level one and level two) is given in Figure 5 below.

Figure 5 - A priori model specification



The next section of the chapter addresses the issue of the minimum sample size required for such a model.



4.8.2 Minimum sample size requirements for model identification

Structural Equation Modelling, being a complex technique that estimates multiple parameters at once requires a certain minimum sample size in order have sufficient information so as to produce a meaningful result or any result at all.

There is no clear-cut rule on the sample size, however researchers have recommended in the past that 5-10 cases (responses) for each model parameter (Bentler & Chou, 1987) are required in order for the model to be properly identified.

Based on the model flowing from the literature review the number of parameters was estimated at 28, therefore the minimum sample that needed to be achieved in order to successfully fit this model was 280 cases.

Jackson (2003) in his simulations was only able find "some evidence" to support the number of cases rule, and suggested that perhaps an absolute sample size specification of 200 may be appropriate.

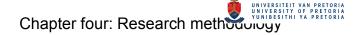
In view of the above, the achieved sample of 509 was considered sufficient to attempt to fit the *a priori* structural model to the data. In view of the fact that the measurement model had less parameters than the structural model, by definition, the minimum sample requirement was also satisfied in its case.

Before looking at the model estimation it is important to highlight the methods of estimation and evaluation as they are common for all models discussed below.

4.8.3 Model estimation and evaluation methods

Structural models in LISREL are typically estimated using the Maximum Likelihood method (ML), which similar to many other methods has assumptions.

One assumption ML method has is that it needs the underlying data to follow a





multivariate normal distribution. It is shown in chapter five, that the underlying data obtained through the survey did not follow a normal distribution, never mind a multivariate normal, so using ML would not be recommended.

Indeed, Browne (1987, p. 375) has pointed out that the violation of normality assumption "can seriously invalidate the chi-squared asymptotic distribution for the test of fit as well as the usual formulae for standard errors of estimators". The end result is that test statistics for goodness of fit or evaluation of path coefficients become unreliable.

In order to resolve this problem, Browne (1987) developed the Robust Maximum Likelihood (RML) method which can be used on data violating the normality assumption of the traditional ML.

LISREL implements the RML method of estimation as developed by Browne (1987) and extended by Satorra and Bentler (1988 as cited in Mels (2006)). The method requires the asymptotic covariance (Mels, 2006) matrix to be used together with the covariance matrix.

All models discussed in this study were estimated using the Robust Maximum Likelihood Estimation (RML) method.

When it comes to evaluating a model estimated using a maximum likelihood method as implemented in LISREL and other software packages, many indices exist to evaluate the fit of the model to the data. Each of these indices works in different ways and typically more than one is reported (Fan, Thompson, & Wang, 1999; Hooper, Coughlan, & Mullen, 2008; Hu & Bentler, 1999; Sharma, Mukherjee, Kumar, & Dillon, 2005). Below, the common indexes their interpretation are discussed.



4.8.3.1 χ^2 test statistics

The standard test statistic in structural equation modelling is the χ^2 statistic, which describes the discrepancy between the fitted covariance matrix and the sample (Hu & Bentler, 1999) which in effect provides a test of how well the specified model fits the data (Mayfield & Mayfield, 2008). As with the normal Chi-squared goodness-of-fit test commonly used for hypothesis testing of differences between categorical variables, when substantial differences between expected and actual distributions exist, the test is significant. Therefore, a *non-significant* statistic value indicates a good fit of the model to the data.

The adequacy of the chi-squared statistic has often been questioned. Hu, Bentler, and Kano (1992) argued that "it becomes easy to reject a model with the growth of the sample size". As the number of parameters in the model grows, test statistic is also expected to grow as it tries to account for all relationships between the constructs, resulting in an apparent poor model fit (Cheng, 2001). Furthermore, χ^2 statistic can be affected by the non-robustness of the data (e.g., normality violation), which is why Hu and Bentler (1999) have recommended the use of the Sattora-Bentler scaled chi-square statistic (Satorra & Bentler, 1988 as cited in Mels (2006)), which "works well under various conditions, including non-robustness".

Various authors have also addressed the χ^2 limitations by developing goodness-of-fit indices that take a more pragmatic approach to the evaluation process. Hu and Bentler (1999) say in this regard that such measures can be classified into two groups – absolute and incremental. Absolute indices do not take into account any reference model, but try to estimate how well an *a priori* model fits the sample data, while incremental fit indices measure proportionate



improvement of the *a priori* model compared to a null model, in which all observed variables are uncorrelated (Hu & Bentler, 1999).

Commonly reported absolute indices include Root Mean Square of Approximation (RMSEA), Standardised Root Mean Residuals (SRMR), Goodness-of-Fit Index (GFI) and Adjusted GFI (AGFI).

Commonly used incremental indices include, *inter alia*, the Tucker–Lewis Index (TLI), which is reported in LISREL as Non-Normed Fit Index (NNFI) and Comparative Fit Index (CFI) (Hooper et al., 2008; Hu & Bentler, 1999; Sharma et al., 2005). All the relevant indices are briefly discussed below.

4.8.3.2 Absolute fit indices

SRMR is a summary of the average of residual variances and covariances. Values *below 0.06* generally indicate an acceptable fit according to Hu and Bentler (1999), who generally encourage the use of this index in conjunction with other indices in line with the two index reporting rule they proposed.

The RMSEA statistic aims to determine how well the model with the parameter values derived from the sample could be expected to fit the population covariance matrix. It is a function of the fitting function value relative to the degrees of freedom (Browne & Cudeck, 1993). Hu and Bentler (1999) found that values of RMSEA *less than 0.06* indicate a good fit and that this cut-off value is able to detect a fair amount of misspecified models. Similarly, Sharma et al. (2005) also suggest its use.

Goodness of Fit index (GFI) and subsequently Adjusted Goodness of Fit index was created as an alternative to the χ^2 test by Joreskog and Sorbom (1982). The indices take into account the variances accounted for by the model and show how well the model manages to represent the observed covariance and thus are classified as absolute indices. To get the adjusted index, AGFI is



adjusted by the degrees of freedom, meaning that less parsimonious models reduce the goodness-of-fit (Hooper et al., 2008). In recent literature, these two indices received considerable criticism as it was found that they are affected by the sample size. Therefore many have recommended against their use to evaluate model fit on a stand-alone basis (Hu & Bentler, 1999; Sharma et al., 2005), however they are often still reported due to their historical significance. The value of >0.9 should generally indicate acceptable fit (Hooper et al., 2008).

4.8.3.3 Incremental fit indices

Tucker–Lewis Index (TLI), also called Non Normed Fit Index (NNFI) in LISREL output, is an incremental index which compares the χ^2 obtained through the model to the null model, in which everything is uncorrelated. Since the index is non-normed its values can go above one, which makes it difficult to interpret in absolute terms, however Hu and Bentler (1999) have suggested the use of this index in conjunction with SRMR and found that values above 0.95 indicate an acceptable fit. Similarly, Sharma et al. (2005) arrived at the conclusion that TLI is one of the better indices to detect model misspecification and strongly advocated its use.

According to Müller (2003) the Comparative Fit Index (CFI) as developed by Bentler (1990) is an adjusted version of the Relative Non-Centrality Index of McDonald and Marsh (1990). Indeed, Hu and Bentler (1999) treat CFI and RNI in an identical way for their two-index presentation strategy, while Sharma et al. (2005) put the index in the same league as the TLI and strongly advised its use. Hu and Bentler (1999) suggested that similar to TLI, values above 0.95 are acceptable.



4.8.3.4 Index presentation strategy and evaluation criteria

Before proceeding to the model results, however, it is imperative that the researcher outlines the strategy used to evaluate how well the model fits the data. Given the plethora of indices available (only the more common ones were outlined above) with some sensitive to the measurement model misspecification and others to structural model issues (Sharma et al., 2005), reporting only some indices is definitely not recommended. Hu and Bentler (1999) put forward the two-index presentation strategy for the very reason that indices are sensitive to the two main components of the model: measurement and structural. Though more recently Fan and Sivo (2005) replicated the study controlling for model complexity and found little evidence to the conclusion of Hu and Bentler (1999) that two indices sensitive to different aspects were sufficient, they nonetheless recommended that more than one index is reported.

The authors also suggested that it may be inappropriate to completely discard indices with undesirable characteristics, such as sensitivity to sample size and lack of sensitivity to misspecification (NFI, GFI, AGFI). It was suggested that further studies which incorporate severely misspecified models into analysis (Fan & Sivo, 2005) are needed prior to discarding any indices that have been historically used.



Therefore for the purposes of this research the following measures are reported and used in evaluating model fit:

Table 4 - Cut off values for evaluating model fit

Measure	Acceptable fit Good Fit	
Satorra-Bentler χ^2	N/A	p-value >0.05
RMSEA	≤0.08	≤0.06
SRMR	≤0.10	≤0.05
TLI (NNFI)	≥0.95	≥0.97
CFI	≥0.95	≥0.97
GFI	≥0.90	≥0.95
AGFI	≥0.85	≥0.90

Adapted from: Müller (2003), Hu and Bentler (1999), Sharma, Mukherjee, Kumar and Dillon (2005).

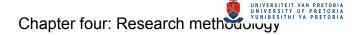
The models estimated in chapter five are evaluated in accordance with indices and their corresponding cut off values as presented in Table 4 above.

The next, concluding, section of the chapter briefly discusses the research limitations emanating from the abovementioned research methodology.

4.9 Potential research limitations

This research was undertaken in South Africa amongst the employees of one of the big four South African banks. Although it is believed that the concepts studied were abstract enough in order to explore the relationships between them based on individual responses, the fact that all respondents were associated with the same company poses a limitation on the way the results can be generalised for other uses. Future research could focus on testing the relationships on a wider scale.

Furthermore, the self-completion method was affected by the subject selection bias (Saunders & Lewis, 2012). Some respondents explicitly chose not to complete the survey, while others simply did not react to the invitation. There is





no way of knowing if the motivation to complete the survey was influenced by some factors, resulting in unknown biases.

Lastly, the research findings are grounded in theory and it is possible that the final model of employee engagement may represent only a portion of the truth. Further research opportunities are discussed in the concluding chapter to address this point.

4.10 Summary

This chapter detailed the methodology that was followed in the research. Since the constructs explored by the research had a high degree of scientific crystallisation, the survey method was used to obtain primary data from respondents.

Data was analysed using SAS 9.2 for basic descriptive statistics, while LISREL 8.72 was used for modelling the structural equations, representing the relationships between the latent variables.

It was found that due to the complexity of Structural Equation Modelling many measures to evaluate the model fit were created in the literature. This chapter briefly discussed the more commonly reported ones and provided a clear view on the index reporting and evaluation strategy.

The following chapter gives a detail account of the analysis procedure together with the associated results.





5 Chapter five: Results

This chapter provides the results obtained from the self-completion online survey as detailed in chapter four. The results are presented in the following logical order:

- Response profile
- Descriptive statistics
- Scale consistency and validity
- Structural model estimation

Discussion of the results relative to the expectations emanating from the literature review is given in chapter six of this paper.

5.1 Response profile

The online survey was run for two weeks during the month of September 2012.

A total of 509 usable responses were obtained. The resulting response rate is given in the table below:

Table 5 - Survey response

Sample breakdown	Number	Percentage
Total sampling frame (invitations sent)	1,012	100%
Respondents opted out	21	2.1%
Total responses	556	54.9%
- Of which fully completed and usable	509	50.3%
- Incomplete responses	47	4.6%
Non-response (implied opt-out)	435	43.0%

It is clear from the table above that the survey was relatively well-received (54.9% attempted to complete it), considering that only about 30% response rate was expected, based on researcher's past experiences and online survey



industry averages (Hamilton, 2009). Incomplete / unusable responses represented 4.6% of the total invitations sent or 8.5% of total responses received. Therefore over 90% of responses were usable.

In the next section descriptive statistics for the obtained sample are presented.

5.2 Descriptive statistics

This section of chapter five provides descriptive statistics for the sample, first by looking at the demographic information pertaining to the respondents and thereafter by providing descriptive analysis of the measurement items for each construct.

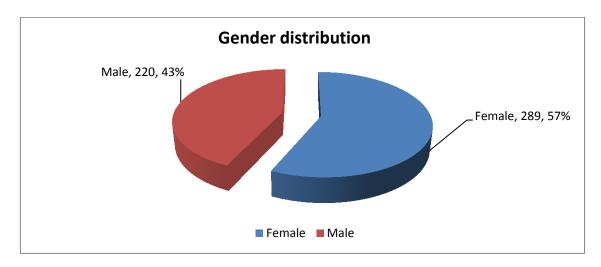
5.2.1 Demographics

The following demographic information for respondents was collected: Gender, Home Language, Location, Organisational level (distance from the top), Number of direct reports, Managerial level, Department as well as employment duration.

5.2.1.1 Gender

The following chart gives the gender distribution in the sample.





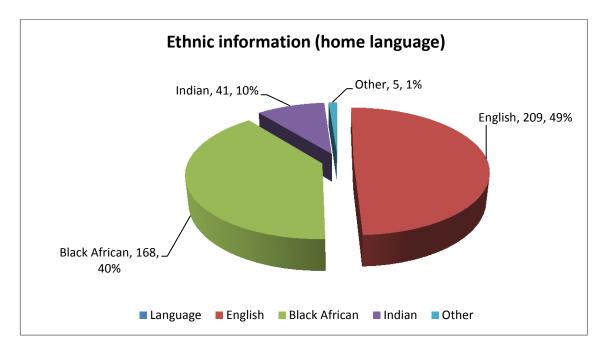


It can be clearly seen from Figure 6, that there are more females than males in the sample.

5.2.1.2 Home language

The sample included respondents, who have indicated that they identified with the various home languages in order to determine the ethnicity of the respondents.

Figure 7 - Home language distribution in the sample



From the chart above it is clear that nearly half of the respondents see English as their home language, a further 40% identify with one of the Black African languages (IsiZulu, Setswana, Sesotho, Sesotho, IsiXhosa, Tshivenda, Xitsonga, SiSwati appear amongst the responses) and only 10% have selected one of the Indian languages. Note that a total of nine respondents did not provide any home language information as the demographic questions were not compulsory and respondents were permitted not to disclose this information.



5.2.1.3 Geographical location of respondents

Employees of the bank in question were concentrated in Johannesburg (62.7%) and Durban (24.5%), with the two cities together accounting for nearly 90% of the sample. The remaining responses came from other cities and towns across South Africa.

5.2.1.4 Distance from the top

For each respondent the distance from the top of the business unit was calculated in such a way that the Managing Director of the unit received a level of zero and every subsequent level of the organisation received an incremented number. As can be expected in many organisations, the number of staff gets bigger the further it is away from the top, so the distribution of respondents was in line with the expectations. Note, however, that there were no level-one respondents (the very top management team of the business)¹.

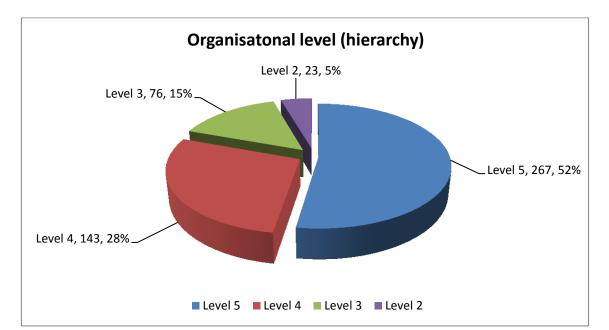


Figure 8 - Distribution of organisation level in the sample

¹ In this case, the lower the level, the higher the individual is in the hierarchy



5.2.1.5 Managerial level and number of direct reports

The next descriptive statistical information describes the respondents in terms of management level and the number of direct reports they manage. The management level was derived from the job title of the respondent.

Consistent with the distance from the top distribution, majority of respondents (46%) were classified into a clerical or an administrative role. A further 37% were classified as managerial level employees.

Table 6 - Management level by number of staff - respondents' profile

Number of direct reports	Managerial Level				
Frequency Percent Row Pct Col Pct	Clerical / Admin	Managerial	Specialist	Total	
0	227 44.60 74.67 96.19	11 2.16 3.62 5.88	66 12.97 21.71 76.74	304 59.72	
1 - 3	7 1.38 10.45 2.97	44 8.64 65.67 23.53	16 3.14 23.88 18.60	67 13.16	
4+	2 0.39 1.45 0.85	132 25.93 95.65 70.59	4 0.79 2.90 4.65	138 27.11	
Total	236 46.37	187 36.74	86 16.90	509 100.00	

Note that a small portion of employees on a managerial level (6%) were found not to have any direct reports. This could be because: (a) some manage only short-term temporary staff who are not reported in the figure; (b) others could be temporarily without staff at the time of survey. Such employees were classified into the managerial category because their title contained the word 'manager'. The smallest portion of the sample were the specialists, who may also be managing small teams of people (usually not more than 3), but their work is specialised / professional in nature (analysts, data managers, legal managers, etc.).



5.2.1.6 Organisational department

The table below presents the distribution of departments within the organisation where the respondents fall. The distribution is consistent with the general distribution of staff in the business unit: majority of staff come from collections / recoveries or sales departments, which are the two biggest and almost equally staffed areas. All of the departments within the business were thus included into the sample proportionally to the population.

Table 7 - Distribution of department in the sample

Department	Frequency	%
Collections and Recoveries	160	31.43
Sales	155	30.45
Operations	116	22.79
Risk and Credit Policy	67	13.16
System Support	7	1.38
Business Strategy	4	0.79
Total	509	100%

5.2.1.7 Employment duration

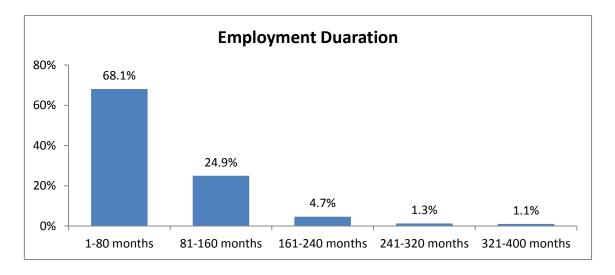
The last piece of information that describes the respondents is the employment duration at the time the questionnaire was completed.

Figure 9 below shows that nearly 70% of respondents have been with the company for up to 80 months prior to the survey, containing around 8% of respondents who joined the company less than six months prior to the survey, and a further 8% who joined less than a year ago.

A further quarter of the respondents started between 81 and 160 months ago, which together with the previous category represents over 90% of respondents.



Figure 9 - Employment duration of respondents



5.2.1.8 Summary

In this section, demographic variables for the respondents were examined. The information is provided for completeness and to verify that the sample structure looks similar to the population structure to avoid any obvious biases. With the exception of the proportion of females, the sample distribution is similar to the expectations held of the population.

The next section presents the univariate analysis of the scale items.





5.2.2 Basic univariate analysis of scale items

As discussed in the research methodology, the constructs studied in this research had a high degree of scientific crystallisation and were measured by using items, known to describe the respective dimensions of each construct.

Table 8 provides basic statistics for items measuring employee engagement.

Table 8 - Univariate analysis - Employee engagement

Var	Description	Mean	Std Dev	Medi -an	Skew- ness	Kurto -sis		
Empl	Employee engagement: Emotional Dedication							
V01	I really put my heart into my job		2.05	9	-1.62	2.42		
V02	I get excited when I perform well on my job		1.77	10	-2.17	5.19		
V03	I often feel emotionally detached from my job (reverse-scored)	6.04	2.75	6	-0.19	-1.03		
V04	My own feelings are affected by how well I perform my job	7.48	2.48	8	-1.04	0.25		
V05	I am enthusiastic about my job	7.88	2.26	9	-1.22	0.9		
V06	My job inspires me	7.55	2.42	8	-1.01	0.28		
V07	I am proud of the work that I do	8.19	2.19	9	-1.5	1.82		
Empl	oyee engagement: Cognitive absorption							
V08	Performing my job is so absorbing that I forget about everything else	6.10	2.54	6	-0.32	-0.75		
V09	I often think about other things when performing my job (reverse-scored)	6.04	2.62	6	-0.2	-1.01		
V10	I am rarely distracted when performing my job	6.48	2.42	7	-0.56	-0.54		
V11	Time passes quickly when I perform my job	7.85	2.19	8	-1.27	1.31		
V12	I feel happy when I am working intensely	7.65	2.13	8	-1.16	1.08		
V13	I am immersed in my work	7.00	2.12	7	-0.6	0.04		
V14	I get carried away when I am working	6.57	2.48	7	-0.57	-0.41		
Employee engagement: Vigour								
V15	At my work, I feel bursting with energy	6.62	2.37	7	-0.53	-0.41		
V16	At my job, I feel strong and vigorous	6.86	2.37	7	-0.68	-0.16		
V17	When I get up in the morning, I feel like going to work	6.70	2.67	7	-0.62	-0.6		

From the descriptive analysis it is clear that the scores on most items of employee engagement are positively skewed, some to higher degrees than others.



Table 9 below gives descriptive statistics for the remaining two measures important to this research: corporate reputation and breach of the psychological contract.

Table 9 - Univariate analysis - Corporate reputation and Psychological contract

Var	Description		Std Dev	Medi -an	Skew- ness	Kurto -sis
Corp	orate reputation					
V18	V18 [Bank] is a company I have a good feeling about		2.01	9	-1.47	2.12
V19	[Bank] is a company that I trust	8.23	1.95	9	-1.41	1.94
V20	V20 [Bank] is a company that I admire and respect		1.95	9	-1.52	2.27
V21	[Bank] has a good overall reputation	8.20	1.90	9	-1.31	1.61
Bread	ch of psychological contract					
V22	ALMOST ALL PROMISES made by my employer during recruitment have been KEPT so far <i>(reverse-scored)</i>	4.14	2.54	4	0.64	-0.48
V23	V23 My employer has come through in fulfilling the promises made to me when I was hired (reverse-scored)		2.51	4	0.54	-0.64
V24	V24 So far my employer has done an EXCELLENT job in FULFILLING its PROMISES to me (reverse-scored)		2.58	4	0.6	-0.55
V25	V25 I have NOT RECEIVED EVERYTHING PROMISED to me in exchange for my contributions		2.85	3	0.63	-0.83
V26	My employer has BROKEN MANY of its promises to me, even though I've upheld my side of the deal	3.46	2.71	2	0.99	-0.13

It is evident from the analysis presented in the table above that the scores for perceptions of corporate reputation negatively skewed, similar to the employee engagement items. There is a strong prevalence of scores toward the end of the 1-10 range. Breach of the psychological contract is, on the other hand, positively skewed with more scores clustered towards the bottom end of the 1-10 scale. On higher levels this means that majority of the employees are on average engaged, perceive their employer to have a good reputation and promises made to them are not usually broken.



Furthermore, it should be noted that all items presented above have comparable levels of variance.

5.2.3 Distribution of scale items and normality testing

Even though basic descriptive statistics of the scale items were unequivocal about the skewed distribution of the data for all the items, a summary of normality test is presented in the tables below for the sake of completeness. Testing for normality is important as it informs the choice of the model estimation method later on in the chapter.

The Kolmogorov-Smirnov statistic was used to evaluate normality.

Table 10 - Item normality testing - Employee engagement

Var	Description	Kolmogorov- Smirnov	p-value
Emplo	yee engagement: Emotional Dedication		
V01	I really put my heart into my job	0.2410	<0.010
V02	I get excited when I perform well on my job	0.2755	<0.010
V03	I often feel emotionally detached from my job (reverse- scored)	0.1097	<0.010
V04	My own feelings are affected by how well I perform my job	0.1976	<0.010
V05	I am enthusiastic about my job	0.1947	<0.010
V06	My job inspires me	0.1802	<0.010
V07	I am proud of the work that I do	0.2176	<0.010
Emplo	yee engagement: Cognitive absorption		
V08	Performing my job is so absorbing that I forget about everything else	0.1337	<0.010
V09	I often think about other things when performing my job (reverse-scored)	0.1265	<0.010
V10	I am rarely distracted when performing my job	0.1622	<0.010
V11	Time passes quickly when I perform my job	0.1936	<0.010
V12	I feel happy when I am working intensely	0.2064	<0.010
V13	I am immersed in my work 0.1453 <0		<0.010
V14	I get carried away when I am working	0.1324	<0.010
Emplo	yee engagement: Vigour		
V15	At my work, I feel bursting with energy	0.1396	<0.010
V16	At my job, I feel strong and vigorous	0.1557	<0.010
V17	When I get up in the morning, I feel like going to work	0.1486	<0.010



Table 11 - Item normality testing - Corporate reputation and Psychological Contract

Var	Description Kolmogorov- Smirnov			
Corpo	rate reputation			
V18	[Bank] is a company I have a good feeling about	0.2052	<0.010	
V19	[Bank] is a company that I trust	0.2142	<0.010	
V20	[Bank] is a company that I admire and respect	0.2121	<0.010	
V21	[Bank] has a good overall reputation	0.1983	<0.010	
Breach	of psychological contract			
V22	ALMOST ALL PROMISES made by my employer during recruitment have been KEPT so far <i>(reverse-scored)</i>	0.1606	<0.010	
V23	My employer has come through in fulfilling the promises made to me when I was hired (reverse-scored)	0.1562	<0.010	
V24	So far my employer has done an EXCELLENT job in FULFILLING its PROMISES to me (reverse-scored)	0.1592	<0.010	
V25	I have NOT RECEIVED EVERYTHING PROMISED to me in exchange for my contributions	0.1869	<0.010	
V26	My employer has BROKEN MANY of its promises to me, even though I've upheld my side of the deal	0.2295	<0.010	

The Kolmogorov-Smirnov statistic works with the null hypothesis that the underlying data distribution is normal. A significant statistic value (p<0.01 in all cases) means that the null hypothesis is rejected, meaning that the underlying data distribution is significantly different from normal. Refer to "Appendix B – Scale item distribution plots" for histograms of each variable.

As mentioned above and in chapter four of this text, normality is a theoretical assumption for the most common method of model estimation – Maximum Likelihood. Violation of normality therefore means that another method of estimation, namely Robust Maximum Likelihood has to be used to fit the model to the data (Browne, 1987).

5.2.4 Summary of descriptive statistics

This section of the chapter provided a basic descriptive analysis of the demographic variables as well as construct scale variables. Distribution of the underlying data was examined and it was found to be non-normal. This finding will inform the choice of the model estimation method later in the chapter.





Before attempting to fit the model to the data, the scales had to be checked for internal consistency in order to ensure that they were measuring the same construct. The following section of the chapter deals with this part of analysis.

5.3 Scale consistency and validity

Validity is concerned with establishing that the questionnaire is measuring what was intended. Convergent validity is a situation when indicators measuring the same construct are associated with one another. A scale displaying convergent validity is also said to have internal consistency, which can be measured using the Cronbach's alpha coefficient – a summary measure of item-to-total correlation of the scale. If the coefficient is greater than 0.7, the scale is considered acceptable (Nunnally & Bernstein, 1994).

In this section Cronbach's alpha will be evaluated for each construct, starting with the components of employee engagement, reputation and concluding with the breach of psychological contract

5.3.1 Employee engagement

In this sub-section internal consistency of the employee engagement measure is discussed.

5.3.1.1 Emotional dedication

Initial examination of items V01 to V07 which comprise the scale for Emotional Dedication component of employee engagement revealed Cronbach alpha score of 0.79, which is acceptable in principle. However, evaluation of the itemto-total correlations showed that items V03 and V04 have exceptionally low correlation with the total of the scale as presented in the Table 12 below.



Clearly, the reverse-scored items did not work very well and were misinterpreted by the respondents as item V03 does not correlate with the total as expected. Item V04 ("My own feelings are affected by how well I perform my job") is not reverse-scored but it seems to have been misunderstood by respondents, since its correlation is only 0.35, which is very low compared with the other items. Items with low or negative correlation to the total create problems with latent construct measurement, because they reduce the convergent validity of the scale as a whole.

Table 12 - Item-to-total correlation for deleted variable - Emotional Dedication

	Description	Correlation with total	Alpha if removed
V01	I really put my heart into my job	0.7095	0.7424
V02	I get excited when I perform well on my job	0.6546	0.7577
V03	I often feel emotionally detached from my job (reversescored)	-0.0301	0.8834
V04	My own feelings are affected by how well I perform my job	0.3505	0.8072
V05	I am enthusiastic about my job	0.7876	0.7229
V06	My job inspires me	0.7906	0.7187
V07	I am proud of the work that I do	0.7617	0.7296

In light of the above, items V03 and V04 have been removed from the scale measurement and the resulting Cronbach's alpha increased to 0.91, which is indicative of exceptional internal consistency. New item-total correlations are presented in Table 13 below.

Table 13 - Item-to-total correlation for deleted variable - Emotional Dedication (adjusted)

	Description	Correlation with total	Alpha if removed
V01	I really put my heart into my job	0.7433	0.9018
V02	I get excited when I perform well on my job	0.6819	0.9142
V05	I am enthusiastic about my job	0.8529	0.8787
V06	My job inspires me	0.8202	0.8871
V07	I am proud of the work that I do	0.8200	0.8860



It is evident that the remaining items display a high level of internal consistency.

Deletion of any one of these items would only drop the alpha coefficient.

5.3.1.2 Cognitive absorption

Cognitive absorption dimension of employee engagement has exactly the same problem as Emotional Dedication: initial Cronbach alpha including all the items was calculated as 0.74, and one reversed-scored item within the scale had negative item-to-total correlation (V09 – "I often think about other things when performing my job"). Table 14 below provides item-to-total correlations for this scale.

	Description	Correlation with total	Alpha if removed
V08	Performing my job is so absorbing that I forget about everything else	0.5674	0.6919
V09	I often think about other things when performing my job (reverse-scored)	-0.0492	0.8303
V10	I am rarely distracted when performing my job	0.4453	0.7213
V11	Time passes quickly when I perform my job	0.6525	0.6771
V12	I feel happy when I am working intensely	0.6233	0.6848
V13	I am immersed in my work	0.6519	0.6789
V14	I get carried away when I am working	0.5299	0.7014

Table 14 - Item-to-total correlation for deleted variable - Cognitive Absorption

Removal of item V09 from the scale improves the Cronbach's alpha to 0.83, and from Table 15 it is clear that no other item is overly offensive to the internal consistency measure.



Table 15 - Item-to-total correlation for deleted variable - Cognitive Absorption (adjusted)

	Description	Correlation with total	Alpha
V08	Performing my job is so absorbing that I forget about everything else	0.6044	0.8029
V10	I am rarely distracted when performing my job	0.4452	0.8354
V11	Time passes quickly when I perform my job	0.6760	0.7884
V12	I feel happy when I am working intensely	0.6307	0.7979
V13	I am immersed in my work	0.6932	0.7859
V14	I get carried away when I am working	0.5916	0.8055

One should note, however, that item V10 ("I am rarely distracted when performing my job") may have been somewhat misinterpreted by some respondents, considering its low correlation with total (e.g., missing the word "rarely" changes the meaning of the item), however its elimination would not aid internal consistency in any material way. The last component of employee engagement – Vigour – is discussed in the following sub-section.

5.3.1.3 Vigour

The vigour dimension of employee engagement displayed a good level of internal consistency, with Cronbach's alpha of 0.92. Table 16 shows item-to-total correlation of each variable, and alpha if the item is deleted. No changes were made to the scale in this instance.

Table 16 - Item-to-total correlation for deleted variable - Vigour

	Description	Correlation with total	Alpha if removed
V15	At my work, I feel bursting with energy	0.8585	0.8739
V16	At my job, I feel strong and vigorous	0.8450	0.8843
V17	When I get up in the morning, I feel like going to work	0.8271	0.9035

The next section deals with internal consistence of the corporate reputation scale.





5.3.2 Corporate reputation

The RepTrak™ scale as discussed by Ponzi et al. (2011) shows remarkable levels of internal consistency with Cronbach's alpha at 0.96.

Table 17 - Item-to-total correlation for deleted variable - Corporate reputation

	Description	Correlation with total	Alpha if removed
V18	[Bank] is a company I have a good feeling about	0.8922	0.9465
V19	[Bank] is a company that I trust	0.9195	0.9382
V20	[Bank] is a company that I admire and respect	0.9121	0.9404
V21	[Bank] has a good overall reputation	0.8648	0.9542

Table 17 presents the item-to-total correlation for each scale item and it is clear that all of the questions are consistent in measuring the underlying construct. No exclusions are necessary in this instance as the scale has high convergent validity.

The next section looks at the measure for Psychological Contract Breach.

5.3.3 Psychological Contract Breach

The scale measuring the breach in psychological contract represented by items V22 to V26 scored 0.88 on Cronbach's alpha, indicating a reasonably high level of internal consistency.



Table 18 - Item-to-total correlation for deleted variable - Psychological Contract Breach

	Description	Correlation with total	Alpha if removed
V22	ALMOST ALL PROMISES made by my employer during recruitment have been KEPT so far (reversescored)	0.7846	0.8401
V23	My employer has come through in fulfilling the promises made to me when I was hired (reversescored)	0.7798	0.8415
V24	So far my employer has done an EXCELLENT job in FULFILLING its PROMISES to me (reversescored)	0.7985	0.8364
V25	I have NOT RECEIVED EVERYTHING PROMISED to me in exchange for my contributions	0.6261	0.8789
V26	My employer has BROKEN MANY of its promises to me, even though I've upheld my side of the deal	0.6117	0.8803

It is clear from Table 18 that most items display a reasonably high correlation with the total of all items. Items V25 and V26 stand out as having the lowest correlation with total, most probably due to the different wording: items V22 to V24 are worded in terms of keeping promises (+), while items V25 and V26 are worded as breaking promises (-). However, if the items are removed alpha would not increase substantially. Overall the scale displays high levels of internal consistency and can be used as is.

5.3.4 In summary

In this section of the chapter internal consistency of the scales was evaluated. Some items had to be excluded as a result of misinterpretation by respondents but resulting scales were found to have high levels of internal consistency. The next section uses these scales to fit a structural model to the data.





5.4 Structural model estimation

In this section, the results of model estimation are presented in order of the analysis steps executed by the researcher:

- Level one measurement model of Employee Engagement
- Level two (full) measurement model
- Structural model of Employee Engagement, Corporate Reputation and Breach of Psychological Contract

5.4.1 Level one measurement model – Employee Engagement

As a starting point the level one measurement model of employee engagement was estimated, using the manifest variables as described in the previous section dealing with internal consistency. The results are presented in Figure 10 and goodness-of-fit data in Table 19.

Figure 10 - Estimated Level one measurement model of Employee Engagement

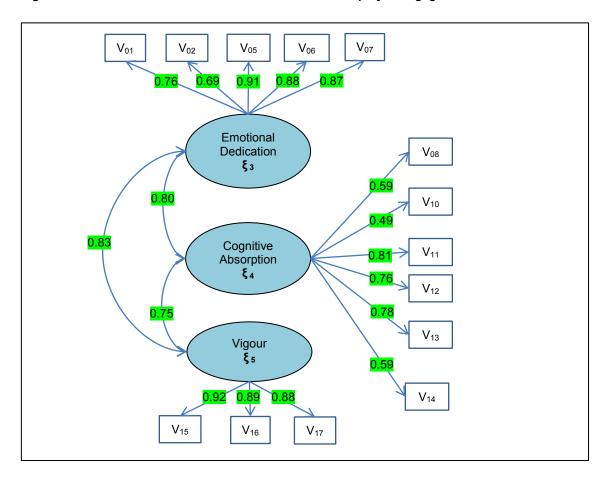




Table 19 - Level one measurement model of employee engagement: Goodness-of-fit

Measure	Value	Interpretation
Satorra-Bentler χ^2	151.5897	P<0.05, therefore the null hypothesis that model fits
	P=0.0000	data well is rejected.
RMSEA	0.04543	<0.06, Good Fit
SRMR	0.04615	<0.05, Good Fit
TLI (NNFI)	0.9926	>0.97, Good Fit
CFI	0.9940	>0.97, Good Fit
GFI	0.9175	>0.90, Acceptable fit
AGFI	0.8830	>0.85, Acceptable fit

It is clear from the diagram above, that most of the manifest variables have high loadings on the corresponding latent factors. Item V10 has the lowest loading of 0.49 as can be expected from the internal consistency analysis, but even that is significant with the t-value of 10.52 (>1.96 for 95% confidence).

As far as the overall fit of this measurement model is concerned, most of the indicators showed a good fit, according to the cut off values specified in chapter four. However, the χ^2 test results lead to the rejection of the null hypothesis that the model fits the data well. Coupled with only acceptable fit readings for GFI and AGFI it was decided to review the measurement model in order to find the offending specification.

Examination of the modification indices has revealed that errors of several manifest variables were strongly correlated:

- Emotional dedication items: V05 ("I am enthusiastic about my job") and
 V06 ("My job inspires me") with V07 ("I am proud of the work that I do").
- Cognitive Absorption item: V08 ("Performing my job is so absorbing that I forget about everything else") with V14 ("I get carried away when I am working").

Needless to say this is not surprising, considering that the latent variables in level one model define another latent variable, which is evident from their close



correlation with each other – lowest covariance between the level one latent constructs was 0.75. So covariance between error terms of certain factor items is probably unavoidable, especially given the multitude of manifest variables in each of the three constructs comprising employee engagement. Note that the meaning conveyed by the items is also fairly close for the items which were found to co-vary. As a result it was decided to remove items V05 and V06 and retain item V07, since it was more specific and dealt with the pride felt towards the organisation. Similarly, item V08 was removed in favour of item V14 – both items convey the same meaning and the latter had simpler wording.

The model was run with exclusions and results are presented in Figure 11 below, and goodness-of-fit in Table 20.

 V_{02} $V_{07} \\$ V_{01} 0.72 **Emotional** Dedication ξ3 V_{10} 0.48 Cognitive 0.81 Absorption ξ4 V_{12} 0.77 V_{13} Vigour ξ5 V_{14} V_{15} V_{16} V_{17}

Figure 11 - Adjusted Level one measurement model of Employee Engagement







Table 20 - Level one adjusted model of employee engagement: Goodness-of-fit

Measure	Value	Interpretation
Satorra-Bentler χ^2	55.9476 p=0.0598	P>0.05, therefore the null hypothesis that model fits data well is not rejected
RMSEA	0.02679	<0.06, Good Fit
SRMR	0.03313	<0.05, Good Fit
TLI (NNFI)	0.9973	>0.97, Good Fit
CFI	0.9980	>0.97, Good Fit
GFI	0.9604	>0.95, Good fit
AGFI	0.9362	>0.90, Good fit

It is clear from Table 20 that the adjusted measurement model of employee engagement fits the data better than the original one as a result of exclusion of items that were measuring aspects similar to the remaining items. It is clear from the size of factor loadings that all manifest variables load onto the same factor. Needless to say, all factor loadings were significant with the smallest tvalue 10.21.

From the revised model, latent variable scores for Emotional Dedication, Cognitive Absorption and Vigour were calculated and stored in the dataset. These three factor scores were employed in the second level measurement model, discussion of which follows in the next section of this chapter.



5.4.2 Level two (full) measurement model

Following the estimation of the measurement model for employee engagement and relevant modifications, the full measurement model was constructed using latent variable scores of Cognitive Absorption (CA), Emotional Dedication (ED) and Vigour (VIG) as indicators of Employee Engagement, while Corporate Reputation and Psychological Contract Breach were defined through their respective manifest variables, as discussed earlier in this chapter. The results of model estimation are provided in Figure 12.

ED VIG CA **Employee** Engagement V_{22} V_{23} Psychological Contract Breach 0.91 V_{24} V_{25} Corporate Reputation V_{26} V_{21} V_{18}

Figure 12 - Level two (full) measurement model estimation

Examination of the diagram reveals that each of the three latent factors has manifests with very high factor loadings. Variables V25 and V26 have lowest factor loadings due to the inverse nature of their wording, as was shown earlier in this chapter. The model fit the data very well overall, as is clear from fit indices shown in Table 21.



Table 21 - Level two measurement model: Goodness-of-fit

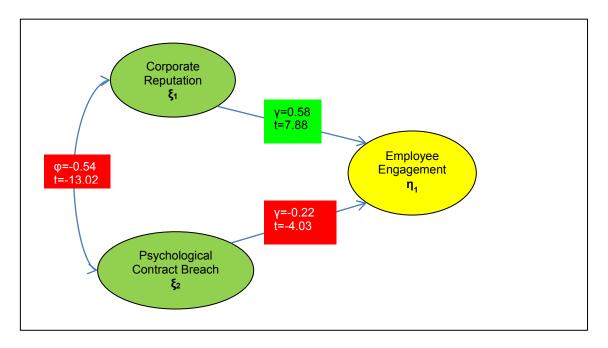
Measure	Value	Interpretation
Satorra-Bentler χ^2	61.8725 p=0.1210	P>0.05, therefore the null hypothesis that model fits data well is not rejected
RMSEA	0.02162	<0.06, Good Fit
SRMR	0.03093	<0.05, Good Fit
TLI (NNFI)	0.9984	>0.97, Good Fit
CFI	0.9988	>0.97, Good Fit
GFI	0.9626	>0.95, Good fit
AGFI	0.9416	>0.90, Good fit

All the indices indicate good fit, therefore the model is deemed acceptable and the final structural model may be fitted.

5.4.3 Structural model

The structural model (excluding the measurement component for simplicity's sake) with the estimated coefficients and t-values is shown in the figure below.

Figure 13 - Estimation of structural model



It is clear from the diagram above that the constructs behave as expected: corporate reputation perceptions and breach of psychological contract are negatively related. Similarly, perceptions of corporate reputation positively affect employee engagement, with a significant coefficient. Furthermore as expected



from the literature review, breach of psychological contract also negatively affects employee engagement, albeit on a smaller scale than corporate reputation.

Since the structure of the measurement model parameter matrix is not very different from the structural model (covariance parameter substituted with directional beta), goodness-of-fit indices are expected to be the same. They are nonetheless provided in Table 22.

Table 22 - Goodness-of-fit indices of the structural model

Measure	Value	Interpretation
Satorra-Bentler χ^2	61.8725 p=0.1210	P>0.05, therefore the null hypothesis that model fits data well is not rejected
RMSEA	0.02162	<0.06, Good Fit
SRMR	0.03093	<0.05, Good Fit
TLI (NNFI)	0.9984	>0.97, Good Fit
CFI	0.9988	>0.97, Good Fit
GFI	0.9626	>0.95, Good fit
AGFI	0.9416	>0.90, Good fit

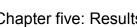
Therefore, it can be concluded the model fits the data well.

Furthermore, all hypotheses outlined in chapter three of this research paper are confirmed due to the significant t-test statistics. Table 23 provides a summary of the test statistic and outcomes.

Table 23 - Hypothesis testing results

Hypothesis	Coefficient and t-value	Interpretation
H1: Psychological contract breach is negatively related to employee engagement. H _{0:} γ=0; H _{a:} γ<0;	γ= -0.22 t= -4.03	t < -2.33, therefore the coefficient is significantly different from zero with 99% confidence. H1 Supported
H2: Employee perceived corporate reputation is positively related with Employee Engagement. H _{0:} γ=0; H _{a:} γ>0;	γ= 0.58 t= 7.88	t > 2.33, therefore the coefficient is significantly different from zero with 99% confidence. H2 Supported
H3: Employee perceived corporate reputation and state of the psychological contract are negatively correlated. $H_{0:} \phi = 0$; $H_{a:} \phi < 0$;	φ= -0.54 t= -13.02	t < -2.33, therefore the coefficient is significantly different from zero with 99% confidence. H3 Supported







5.5 Conclusion

In this chapter, the data analysis procedure was presented as per the steps outlined in chapter four.

First, the respondent's demographic profile was constructed. Thereafter descriptive statistics were calculated, distribution was tested for normality and internal consistency scores were calculated. Following some modifications, measurement and structural models were estimated. All hypotheses as stated in chapter three were confirmed.

The following chapter discusses the findings outlined above, linking them with the theoretical background of chapter two.



6 Chapter six: Discussion of results

Following the presentation of results including model estimation in chapter five above, this chapter discusses the findings, comparing them to the theoretical background that was laid out in chapter two.

Review of the theoretical literature led to the conceptualisation of relationships between the constructs, which were formalised through the statement of hypotheses in chapter three.

The following hypothesis emanating from the research problem and the literature review were tested in chapter five:

- **H1**: Psychological contract breach is negatively related to employee engagement (Bal et al., 2010; Hemdi & Abdul Rahim, 2011)
- **H2**: Employee perceived corporate reputation is positively related with Employee Engagement (Davies et al., 2004; Helm, 2011; Lin, 2009; Men, 2012)
- **H3**: Employee perceived corporate reputation and state of the psychological contract are negatively correlated (Shamma, 2012; Walker, 2010)

This chapter is broken into sections representing each research hypothesis as outlined above, followed by the overall conclusion.

While this chapter starts to lead towards the overall implications of the study, they are discussed in detail in chapter seven of this work.



6.1 Hypothesis one: psychological contract breach and employee engagement

The first hypothesis of this is not at the core of this study, but rather serves as control variable that clarifies the main relationship between corporate reputation and employee engagement.

Chapter three of this paper formulated the hypothesis in terms of the alternative to the null, where the full hypothesis pair should read as follows:

 H_0 : Psychological contract breach is not related to employee engagement: y = 0

H_a: Psychological contract breach is negatively related to employee engagement:

y < 0

The hypothesis was informed by the literature review of employee engagement, where it was established that the construct has a relational component to it. In this regard, D. Robinson et al. (2004) asserted that organisations must look after the relationship between employer and the employee in order to nurture engagement, while Saks (2006, p. 603) proposed that the Social Exchange Theory (SET) (Cropanzano & Mitchell, 2005) may help in explaining the variation between reported employee engagement and antecedents as described by Kahn (1990). SET suggests that employees "feel obliged" to respond to economic and socio-emotional resources they receive from the organisation as long as the "rules" of the exchange, represented by the psychological contract in the case of employee-employer relationship, are not violated. Therefore, psychological contract is a variable that is likely to influence engagement.



Further evidence to this hypothesis was provided by Hemdi and Abdul Rahim (2011), who found that violation of the psychological contract influences affective commitment that employees display towards organisations. Similarly, Bal et al. (2010) found that Organisational Citizenship Behaviour, which was conceptualised as a consequence of Employee Engagement in chapter two, is affected by psycholofical contract breach.

It is clear from the statistics presented in chapter five, that the null hypothesis above was rejected due to the significant t-value (one-tailed test) associated with the path coefficient (t = -4.03 < -2.33).

The negative sign of the coefficient confirms that breach of psychological contract negatively affects employee engagement. In other words there is substantial evidence to believe that the alternative hypothesis holds true, thereby confirming the theoretical conceptualisation of the relationship, as discussed above and in previous chapters.

The standardised beta coefficient of the path Psychological Contract Breach (PCB) – Employee Engagement (EE) was -0.22 in presence of corporate reputation (see chapter four, Figure 13). However, in order to examine the path PCB-EE without corporate reputation perception, an alternative model was estimated, where PCB was the only predictor of EE (Figure 14).

Figure 14 – Structural model of Psychological Contract and Employee Engagement only



The result increased the beta coefficient to -0.53, in an otherwise acceptable model (RMSEA=0.03892, NNFI=0.9946, CFI=0.9966, SRMR=0.03366, GFI=0.9759, AGFI=0.9518). This finding is indicative of the fact that corporate



reputation is playing a major role in this relationship. In its presence the impact of the psychological contract breach on employee engagement is significantly lower – the remainder is accounted for by corporate reputation.

Another insight emanating from this find is that psychological contract breach influences perceptions of corporate reputation, which in turn influences employee engagement. Therefore, this initial finding already provides evidence that inclusion of psychological contract breach into the model is beneficial to the understating of the relationship between corporate reputation and engagement. This finding will link up with hypothesis three later in the chapter.

The second hypothesis, dealing with the relationship between corporate reputation and employee engagement, is discussed next.

6.2 Hypothesis two: Corporate reputation and Employee Engagement

While the first hypothesis of this study dealt with the relationship that is necessary as a control variable, the second hypothesis emanates directly from the objective of this research, i.e. to study the relationship between corporate reputation and employee engagement.

Chapter three of this paper worded the hypothesis in terms of the alternative to the null, where the full hypothesis pair should read as follows:

H₀: Employee perceived corporate reputation is not related with Employee Engagement:

y = 0

H_a: Employee perceived corporate reputation is positively related with Employee Engagement

 $\gamma > 0$



It is clear from the statistics presented in chapter five, that the null hypothesis above was rejected due to the significant t-value (one-tailed test) associated with the path coefficient (t= 8.63 > 2.33). Therefore it can be said that the hypothesis central to this research holds true and there is substantial evidence that perceptions of corporate reputation by employees and employee engagement are positively related. Naturally, one cannot make any definite statements as to the causality due to the fact that the methodology employed by this research does not lend itself to causal investigations.

It should be noted that while the hypothesis was informed by theory (Davies et al., 2004; Helm, 2011; Men, 2012), it is believed that the nature of the effect of corporate reputation on employee engagement remains relatively underexplored, compared to the opposite direction of employee engagement affecting corporate reputation of other (external) stakeholders. Indeed, even the authors cited above did not exactly study employee engagement in the context of reputation, but rather focused on related constructs, such as affective commitment. Nonetheless, the relationship of employee engagement and corporate reputation is in line with the expectations, emanating from the body of knowledge on this topic.

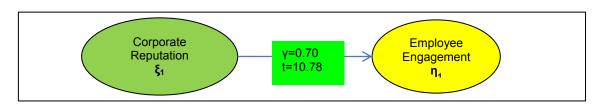
For instance, Men (2012) in a study of CEO credibility and employee engagement, used corporate reputation as a mediating construct in a study that similarly used online surveys and collected perceptions of company employees. The author found that CEO Credibility influences employee engagement through corporate reputation as perceived by the employees, meaning that any distrust in a CEO influences perceptions of reputation, which in turn affects engagement levels. Similarly, it was observed above during discussion of hypothesis one that even though breach of psychological contract has a direct



impact on employee engagement, its influence through corporate reputation is arguably more pronounced.

As was done for hypothesis one, it is important to evaluate the relationship between corporate reputation and employee engagement without the controlling variable of psychological contract breach. The results of such a model as presented in Figure 15, and the path coefficient is significant, considering the t-value produced by the analysis.

Figure 15 - Structural model of Corporate Reputation and Employee Engagement only



The overall model fit is also significant (RMSEA= 0.02366, NNFI= 0.9989, CFI=0.9993, SRMR=0.01824, GFI= 0.9825, AGFI= 0.9622) and is arguably better than that of the original model due to the parsimony arising from one less construct.

Thus, this simple model also confirms that positive perceptions of corporate reputation have a strong positive influence on employee engagement. Indeed, the path coefficient for the impact of reputation on engagement is 0.7 for this model, compared to 0.58 as shown in the model that included psychological contract breach (chapter five, Figure 13). The implication is that once again there is evidence that corporate reputation perceptions are very strongly related to engagement, but when the psychological contract breach (PCB) is taken into account it explains some of the variance in engagement that reputation (REP) was previously seen to explain, which is why the observed path coefficient reduces by 0.12. Note that the difference can also be obtained as a product of the covariance between REP and PCB and individual impact of PCB on



employee engagement (-0.22*-0.54=0.12). On this note, it is fitting to direct the discussion towards the relationship between corporate reputation and psychological contract breach, which is at the centre of the third hypothesis.

6.3 Hypothesis three: Corporate reputation and psychological contract

The third hypothesis evident from the *a priori* model laid down in chapter two deals with the relationship between corporate reputation and psychological contract breach.

As discussed in the literature review, employee perceptions of the corporation are shaped by the actions of the immediate management (Shamma, 2012). Similarly, Walker (2010) points out that reputation does not have to be based on facts and can exist independently from reality, even though it is influenced by real events. This assertion gave rise to the third hypothesis, which was worded as follows:

H₀: Employee perceived corporate reputation and state of the psychological contract are not correlated:

 $\Phi = 0$

H_a: Employee perceived corporate reputation and state of the psychological contract are negatively correlated:

 $\phi < 0$

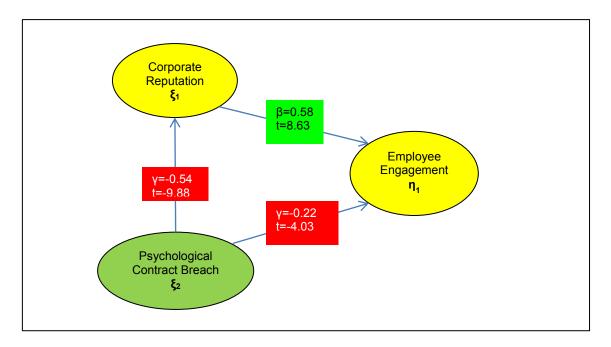
From the results presented in chapter five it is clear that the covariance between the two constructs in questions is significant, given the t-statistic of -12.03 and a coefficient φ = -0.54. Therefore the null hypothesis was rejected, providing evidence that the alternative hypothesis is likely to hold true. Hence



corporate reputation perceptions and psychological contract breach are negatively related.

Recall from earlier discussion, that in the *a priori* model fitted in chapter five, this relationship was specified as a covariance between the two constructs, therefore the parameter that was estimated was phi (ϕ) and not gamma (γ) . The reason for such a specification was grounded in theory, where the relationship between corporate reputation perceptions and psychological contract was implied, but not directly tested. The same model can be re-specified in terms of a gamma coefficient, i.e., psychological contract breach influencing corporate reputation. In fact, such a model was also estimated and the results were identical to the a-priori model. The difference between the two models is thus purely theoretical. Correlation by its nature does not specify directionality, while a gamma-path from psychological contract breach to corporate reputation implies that the former influences the latter, and not the other way around. Figure 16 gives estimated parameters for such a re-stated model.

Figure 16 - Re-stated structural model





Indeed, the coefficients remained exactly the same, but the t-statistics changed for the paths PCB->REP and REP->EE, although both are still highly significant. Overall model goodness-of-fit indices remained the same (only χ^2 statistic has changed marginally, see Table 24 below), indicating that this model is just as significant at the one with the correlation parameter phi.

Table 24 - Goodness-of-fit indices of the re-stated model

Measure	Value	Interpretation
Satorra-Bentler χ^2	61.8726 p=0.1210	P>0.05, therefore the null hypothesis that model fits data well is not rejected
RMSEA	0.02162	<0.06, Good Fit
SRMR	0.03093	<0.05, Good Fit
TLI (NNFI)	0.9984	>0.97, Good Fit
CFI	0.9988	>0.97, Good Fit
GFI	0.9626	>0.95, Good fit
AGFI	0.9416	>0.90, Good fit

Corporate reputation, by definition adopted in chapter two, is an observer's aggregate judgment of a corporation that is shaped through that individual's perceptions of reality. Through assumption that perceptions are preceded by real events, such as keeping or breaking of promises, it is not unreasonable to suppose that psychological contract breach could result in lower perceptions of corporate reputation, especially since it is known that:

- the psychological contract revolves around promises made to the employee (S. L. Robinson & Morrison, 2000), where immediate management is seen as the custodian of such promises; and
- corporate reputation perceptions are affected by managerial action (Shamma, 2012).

Therefore, since the re-stated model is just as good as the *a priori* one, it is suggested that it makes more sense in theory for corporate reputation perceptions to follow the change in state of the psychological contract.



Having discussed each hypothesis separately, it was found that all the relationships hold true. Therefore it is now fitting to discuss the findings in the context of the model as a whole.

6.4 Concluding remarks on the overall model

Even though earlier in the chapter each hypothesis was viewed independently, it was hard not to cross-reference the findings to other constructs in the study. This stems from the fact that relationship between corporate reputation and employee engagement was conceptualised upfront in the presence of the psychological contract state. Empirical evidence presented above further strengthened the original hypotheses.

Examination of the path coefficients showed that corporate reputation perceptions strongly influences employee engagement, however psychological contract breach also has a significant direct link to employee engagement, bypassing corporate reputation.

Notwithstanding this fact, corporate reputation remains the strongest individual influencer of employee engagement in this model, with a coefficient of 0.58 if controlled for psychological contract breach. Since all the constructs were measured on the same scale, the standardised and unstandardised coefficients are the same, and therefore the value of 0.58 means that for each one point increase in corporate reputation perceptions (recall the use of a 10-point scale), employee engagement is likely to increase by just over half a point, while holding psychological contract state constant. Similarly, for each point increase in psychological contract breach, the corporate reputation is expected to decrease by 0.54 points and employee engagement by 0.22 points, holding other variables constant.



6.5 Summary

In this chapter the results of analysis were discussed, linking them to the theoretical background and hypotheses presented in chapter two and three respectively.

It was found, that corporate reputation perceptions are a strong predictor of employee engagement, even in the presence of psychological contract breach, which does reduce the overall impact reputation has on engagement. Needless to say, psychological contract breach was found to influence perceptions of reputation by the employees.

The implications of the findings as well as recommendations for future research are discussed in the concluding chapter of this work.





7 Chapter seven: Conclusion and recommendations

Following detailed presentation of results and the discussion thereof, it is necessary to conclude this research paper with the theoretical and practical implications emanating from the findings, state limitations and discuss future research directions.

As mentioned in the introduction to the research problem, this study involves constructs from two different sciences – managerial psychology / human resources management and marketing. The construct of corporate reputation is more commonly discussed within the ambit of marketing and corporate governance and as such many studies focused the impact of corporate reputation on financial performance of companies or at drivers of reputation. It is not surprising that employees are often seen as a driver of corporate reputation as perceived by external stakeholders (Friedman, 2009; Harris & De Chernatony, 2001; Helm, 2011). This study, however, focused on how corporate reputation affects employee engagement.

It became apparent from the literature review that corporate reputation is an aggregate judgement, grounded in individual perceptions (Barnett et al., 2006) and so it was hypothesised that perceptions of corporate reputation influence employee engagement. However, relationships with management and promises kept or broken were also likely to affect both corporate reputation and employee engagement (Shamma, 2012), and so the model of corporate reputation, psychological contract breach and employee engagement was born.

The model was empirically tested by fitting a model to the data coming from a large sample of employees in a large profit-making corporation in South Africa.





Structural equation technique was used and all hypotheses were confirmed. As a result, the following implications arose from the model.

7.1 Theoretical implications

For the academic world, this study has a number of implications.

First of all, it was established that corporate reputation perceptions are rather strongly influenced by the state of the psychological contract. This suggests that corporate reputation as perceived by employees is not necessarily a stable state of affairs (Walker, 2010) as is the case for the aggregate public reputation, but may be rather more volatile and is shaped by recent events.

It is not suggested that a break in any promise to employees leaves a taint on reputation, but it is rather the enduring breach of psychological contract that negatively affects reputation. This finding has a profound implication for researchers, who study either how employees affect or are affected by reputation, since care must be taken when reputation is measured amongst such stakeholders.

Furthermore, this finding highlights just how important relationships are when it comes to reputation management. Authors who studied reputation have previously highlighted that it took long to build reputation but that it was remarkably easy to destroy (Shamma, 2012). While this research did not go into the time it took for reputation perceptions to change, the fact that it is influenced by broken promises to the employee is supportive of this notion.

This research also makes a first step towards conceptualising psychological contract as an antecedent of reputation amongst employees, which is arguably an underexplored area. It is well known that employees help create reputation in the eyes of other stakeholders, which subsequently leads to financial gain for





the company (Dunbar & Schwalbach, 2000; Eberl & Schwaiger, 2005; Friedman, 2009; Harris & De Chernatony, 2001; Helm, 2011), so this finding sheds more light on how perceptions of reputation are formed in the eyes of employees, so that subsequently it can be translated into reputation in the eyes of other stakeholders, continuing the circle of reputation. This research does not claim to explain this circle, but merely raises an important implication for future studies.

At the core of this research lay the relationship between reputation and employee engagement, which forms part of the reputation circle described above. This study took an opportunity to study a less explored direction, where corporate reputation is seen as a driving force of employee engagement and the relationship informed by theoretical background was confirmed, even when controlling for a mitigating factor of psychological contract breach.

The implication for engagement researchers is that reputation can be conceptualised as one of the drivers of employee engagement. In their discussion of engagement, Kahn (1990) and May et al. (2004) talked about job meaningfulness, psychological safety and availability (in terms or resources) as conditions for employee engagement. While it cannot be categorically stated based on the findings that corporate reputation is a condition of employee engagement, it could be ventured here that it may be a mediating factor between engagement and its antecedents. Indeed, it was shown in this research that reputation is affected by the state of psychological contract, which is governed by supervisor relations in much the same way as good supervisor relations is a condition of employee engagement (Kahn, 1990; May et al., 2004).





The implication for reputation researchers is simpler in its nature. This paper adds to the understanding of corporate reputation and provides further evidence as to the importance of reputation management. Furthermore, psychological contract is an important variable to consider in reputation management. Although future research on this topic is necessary to fully understand how psychological contract may be used to drive reputation, this study provides indications that such managerial actions should be feasible in theory.

Lastly, the model presented in this research estimates the relationships between constructs, controlling for one another, which provides additional insight into the strength and directionality of paths, which could be of interest to academics in the relevant fields of study.

Having discussed the theoretical implications, managerial implications will now be considered in the following section.

7.2 Managerial implications

For the managers, this study also presents a number of implications. The most obvious one is the escalation of importance of corporate reputation for human resources practitioners and general managers alike.

Reputation perception by employees is likely to drive employee engagement, so management should focus their efforts on improving reputation perceptions in the eyes of employees. This is similar to the finding of Men (2012) who suggested that internal communications departments can drive CEO credibility, thereby improving reputation and subsequently engagement.

In the introduction to the research problem at the beginning of this study it was mentioned that reputation brings financial benefits to corporations, which is becoming increasingly important in light of the present economic turmoil. The





central finding emanating from this research confirms that companies with good reputations command a higher level of employee engagement, thereby influencing worker productivity, which in turn could lead to higher profits.

Furthermore, the impact of psychological contract on corporate reputation informs one of the ways of influencing corporate reputation in the eyes of employees. Management, who take cognisance of how psychological contracts unfold, can not only prevent employee turnover and increase work performance, but can also prevent destruction of corporate reputation and possibly even influence it for the better, and employees who hold their organisation in high regard are likely to become ambassadors of reputation, brand and image (Helm, 2011).

Having discussed the theoretical and managerial implications, it is important to highlight the limitations of this study so as to ensure that only appropriate generalisations are made, and provide recommendations for future research.

7.3 Limitations and recommendations for future research

A number of limitations that this research is subject to stem from the methodology as discussed in chapter four. The methodological limitations are highlighted first, followed by other limitations and recommendations.

First, this study was conducted in South Africa and the sampling of respondents was done from one of South Africa's banks. The fact that all respondents were associated with the same company poses a limitation in the way the results can be generalised to other companies, sectors and countries. *Future research could focus on testing the relationships on a wider scale*, involving more companies and / or countries.



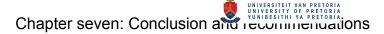


Second, the self-completion method could have introduced a subject selection bias (Saunders & Lewis, 2012). It was clear from the response pattern that some respondents explicitly chose not to complete the survey, while others simply did not react to the invitation. There is no way of knowing if the motivation to complete the survey was influenced by some factors, resulting in unknown biases. One possible bias could be in the demographic composition of respondents – it was demonstrated in chapter five that there were substantially more female respondents in the sample, which is not typical for the bank in question. The impact of this self-selection bias is unknown, could potentially influence the results and should be reported as a limitation.

Third, this study was conducted in a cross-sectional timeframe, therefore it unknown if the findings hold over time. *Future research could focus on conducting a longitudinal study*, measuring perceptions of corporate reputation over time together with the level of engagement and the relevant antecedents.

Fourth, the research findings are grounded in theory and it is likely that the model of employee engagement only represents a portion of the truth. Future research could explore a more complete model of employee engagement, taking into account antecedents and personality trait factors, such as core self-evaluations in the presence of corporate reputation to confirm its impact on engagement.

Fifth, it was shown that corporate reputation is affected by the psychological contract breach, but it is still known what role reputation can play in mitigating the impact of the psychological contract breach. It may be possible that a strong reputation softens the impact of breach, and yet it is also possible that reputation is destroyed if breach happens. Future studies could explore just how





independent corporate reputation is from psychological contract breach as far as employee engagement is concerned.

Lastly, corporate reputation was measured through its outcomes, so no inferences could be made as to which dimension of reputation affects engagement the most. Future studies can focus on investigating reputation not as a latent construct based on reputation outcomes, but by linking employee engagement to individual determinants of reputation.

7.4 Summary

This research was conducted with the objective to investigate the impact corporate reputation has on employee engagement, while controlling for a factor that was expected to influence employee perceptions of reputation – psychological contract breach.

In order to achieve the objective, existing literature pertaining to employee engagement was studied so as to appropriately conceptualise the constructs being studied and to inform the choice of hypothesis which aided in achieving the main objective of this research.

Primary data was obtained using an online survey from employees of a major corporation in South Africa. Responses measured employee perceptions of corporate reputation, psychological violation and employee engagement on measurement scales that were borrowed from the relevant literature.

The data was cleaned and analysed using structural equation modelling technique so as to simultaneously fit linear relationships that stemmed from the research hypotheses. Supporting evidence was found for all the hypotheses outlined in chapter three.





From the data analysis it was established that corporate reputation strongly affects employee engagement, even if controlling for psychological contract breach. It was confirmed that psychological contract breach influences employee engagement directly, albeit on a smaller scale than corporate reputation. The state of contract was found to influence corporate reputation quite significantly.

At the end of this paper, the findings were discussed, providing both theoretical and managerial implications as well as recommendations for future research.

Therefore, after the entire process outlined above, it can be stated that the research objectives have been achieved, in that the relationship between corporate reputation and employee engagement was studied, findings were obtained and linked to the relevant body of knowledge.





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http://www.bloomberg.com/news/2012-09-21/china-slowdown-seen-longer-than-2009-by-government-researcher.html

Hello again!

Thank you for agreeing to participate in my research. I really need your help in this - it is difficult to obtain enough responses, so every person counts!

Based on existing responses, the survey takes 6.5 minutes to complete on average.

Do note that your participation is voluntary and you can withdraw at any time without penalty.

Furthermore, even though I invited you personally to participate, it won't be possible to link your responses to your name, making it **totally anonymous**.

By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact me below.

Artyom Shirin - MBA Student - artyoms@nedbank.co.za, 011 630-7216

Nicola Kleyn - Supervisor - kleynn@gibs.co.za

There are 7 questions in this survey

1 On a scale of 1 to 10, please indicate how much you agree / disagree with the following statements.

Please choose the appropriate response for each item:

	1 =									10 =
	Strongly									Strongly
	disagree	2	3	4	5	6	7	8	9	agree
I really put my heart into my	0	0	0	0	0	0	0	0	0	0
I get excited when I perform well on my job	0	0	0	0	0	0	0	0	0	0
I often feel emotionally detached from my job	0	0	0	0	0	0	0	0	0	0
My own feelings are affected by how well I perform my job	0	0	0	0	0	0	0	0	0	0
I am enthusiastic about my	0	0	0	0	0	0	0	0	0	0





	1 = Strongly disagree	2	3	4	5	6	7	8	9	10 = Strongly agree
My job inspires me	0	0	0	0	0	0	0	0	0	0
I am proud of the work that I do	0	0	0	0	0	0	0	0	0	0
2 On a scale of 1 to 10, please	e indicate hov	w much y	ou agree	e / disagr	ee with t	the follow	wing stat	ements.	*	
Please choose the appropriate	response for e	each item:	:							
	1 = Strongly disagree	2	3	4	5	6	7	8	9	10 = Strongly agree
Performing my job is so absorbing that I forget about everything else	0	0	0	0	0	0	0	0	0	0
I often think about other things when performing my job	0	0	0	0	0	0	0	0	0	0
I am rarely distracted when performing my job	0	0	0	0	0	0	0	0	0	0
Time passes quickly when I perform my job	0	0	0	0	0	0	0	0	0	0
I feel happy when I am working intensely	0	0	0	0	0	0	0	0	0	0
I am immersed in my work	0	0	0	0	0	0	0	0	0	0
I get carried away when I am working	0	0	0	0	0	0	0	0	0	0





3 On a scale of 1 to 10, please indicate how much you agree / disagree with the following statements. *

Please choose the appropriate response for each item:

	1 = Strongly disagree	2	3	4	5	6	7	8	9	10 = Strongly agree
At my work, I feel bursting with energy	0	0	0	0	0	0	0	0	0	0
At my job, I feel strong and vigorous	0	0	0	0	0	0	0	0	0	0
When I get up in the morning, I feel like going to work	0	0	0	0	0	0	0	0	0	0
4 On a scale of 1 to 10, please indicate how much you agree / disagree with the following statements about Nedbank * Please choose the appropriate response for each item:										
Please choose the appropriate	rooperioe ioi v									
Please choose the appropriate	1 = Strongly disagree	2	3	4	5	6	7	8	9	10 = Strongly agree
Nedbank is a company I have a good feeling about	1 = Strongly			4	5	6	7	8	9	Strongly
Nedbank is a company I	1 = Strongly disagree				5		7	8		Strongly
Nedbank is a company I have a good feeling about Nedbank is a company that I	1 = Strongly disagree				5		7 0	8		Strongly





5 This question deals with the psychological contract between you and your employer and refers to promises your employer / manager made either openly and directly or by implication.

Such "promises" could be anything you believe you can reasonably expect from your employer. It could be for example: Remuneration, Growth opportunities, training and development, quality of supervision, support, clear sense of direction, working climate, etc.

On a scale of 1 to 10, please indicate how much you agree / disagree with the following statements *

Please choose the appropriate response for each item:

	1 = Strongly disagree	2	3	4	5	6	7	8	9	10 = Strongly agree
ALMOST ALL PROMISES made by my employer during recruitment have been KEPT so far	0	0	0	0	0	0	0	0	0	0
My employer has come through in fulfilling the promises made to me when I was hired	0	0	0	0	0	0	0	0	0	0
So far my employer has done an EXCELLENT job in FULFILLING its PROMISES to me	0	0	0	0	0	0	0	0	0	0
I have NOT RECEIVED EVERYTHING PROMISED to me in exchange for my contributions	0	0	0	0	0	0	0	0	0	0
My employer has BROKEN MANY of its promises to me, even though I've upheld my side of the deal	0	0	0	0	0	0	0	0	0	0





6 Please select your gender
Please choose only one of the following:
OMale
O Female
7 Please select your cultural language, i.e., the language you identify with. This would often also be your mother tongue.
Please choose only one of the following:
OAfrikaans
English
OlsiNdebele
OlsiXhosa
OlsiZulu
○ Sesotho
O Sesotho sa Leboa
O Setswana
Osiswati
OTshivenda
○ Xitsonga
OPortuguese
Oltalian
○ Greek
O German
O Gujarati
OHebrew
OHindi
Okhoi
ONama





O San	
○ Sanskrit	
O Tamil	
O Arabic	
○ Telugu	
Ourdu	
Swahili	
Outch	
Other	
Thank you for completing this survey.	



10 Appendix B - Scale item distribution plots

