PSYCHOMETRIC EVALUATION OF A LEADERSHIP EMPOWERMENT QUESTIONNAIRE IN SELECTED ORGANISATIONS IN SOUTH AFRICA

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Mini-dissertation submitted as partial fulfilment of the requirements for the degree Magister Artium in Industrial Psychology in the School of Behavioural Sciences at the North-West University, Vaal Triangle Campus

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COMMENTS

The reader is reminded of the following:

- The references as well as the editorial style comply with the requirements prescribed by the *Publication Manual* (6th edition) of the American Psychological Association (APA).

- The mini-dissertation is submitted in the form of a research article.

DECLARATION

I, Senzekile Nompumelelo Desiree Zikalala, hereby declare that psychometric evaluation of a leadership empowerment questionnaire in selected organisations in South Africa is my own work and that the views and opinions expressed in this work are my own and that of relevant literature references as shown in the references.

Furthermore, I declare that the contents of this research study will not be submitted for any other qualifications at any other tertiary institution.

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DECLARATION

This is to certify that the following mini-dissertation was language edited:

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DEDICATION

This dissertation is dedicated to my family, in particular my daughter, Alwande, who has been my source of courage and inspiration; and

To my loving mother, Jabu, and my sister, Amanda, who have been my great pillars of strength. I certainly would not have done this without you.

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TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

LIST OF FIGURES

LIST OF TABLES

SUMMARY

Title: Psychometric evaluation of a leadership empowerment behaviour questionnaire in selected organisations in South Africa

Key terms: Empowerment, leadership empowerment questionnaire, validation, construct validity, internal consistency.

The world of work has become extremely volatile, with the scarcity of skills and the management of human capital at the top of the agenda. Human capital is the most valuable asset in any organisation. It is evident that leadership is vital in organisations in ensuring their success; thus making leadership empowerment behaviour crucial. It is essential that our leaders become people developers who focus on growing and upskilling subordinates as a way of attracting and retaining talent. It is important that leaders create an enabling environment for their subordinates; one of independence, innovation and, more importantly, growth and development.

The purpose of this study was to explore the psychometric properties of the leadership empowerment questionnaire by investigating internal consistency; furthermore investigating the differences between genders regarding male and female perceptions of leadership empowerment behaviour. A quantitative cross-sectional survey was used. The measuring battery comprised the Leadership Empowerment Behaviour Questionnaire (LEBQ), which is originally a six-factor structure. The analysis was carried out using the IBM-SPSS and Mplus statistical modelling programs. Reliability was explored by utilising the Confirmatory Factor Analysis (CFA) index (rho). Construct validity was assessed by examining the factor structure, utilising the Exploratory Factor Analysis (EFA) and the CFA. Satisfactory reliability indices were attained.

A three-factor model of the LEBQ was confirmed. The three-factor model consists of autonomy, development and accountability. Measurement invariance was tested by the use of configural, scalar and metric invariance. The configural model concluded that the three-factor structure obtained for the total sample also holds for the two groups (Males & Females) of

respondents separately. The metric model indicates that the latent variables are measured in the same way with the same metric in the two target groups. The Scalar model indicates that on these three items, males and females differ regarding their starting points in their response to these questions. Although there were differences in the starting points of certain items, there were no real differences evident in the overall model regarding males and females.

Recommendations for further research were made.

CHAPTER 1

INTRODUCTION

This mini-dissertation focused on the psychometric properties of a leadership empowerment behaviour questionnaire. This is a generally used and popular scale in the South African work context. Although this scale is widely used (to the researcher's knowledge), there has not been extensive research to validate the instrument in South Africa.

This chapter contains the problem statement, objectives of the study and the methodology used.

1.1 PROBLEM STATEMENT

The global socio-economic and political scenery is changing rapidly (Boninelli & Meyer, 2011) and organisations in South Africa are placed under immense pressure to bring about drastic changes in order to survive the economic difficulties in the country (Stander & Rothmann, 2009). The weak global economy and unpredictable financial markets have challenged many businesses; therefore leaders need to position their businesses for long term success. The global financial crisis of highly regarded industries as well as challenges faced by educational systems all indicate that change is inevitable (Mayo, 2001). Globalisation has made the world a global village, with new markets offering new challenges as well as opportunities (Ulrich, Brockbank, Johnson, Sandholtz, & Younger, 2008).

Having to compete globally, employees' skills, talent and knowledge are crucial in order to cope and grow (Luthans & Youssef, 2007). In the changing world of work, strategies to grow and develop talent need to be aligned with business goals (Sullivan, 2009). This indicates the importance of people and talent management, with a strong focus on knowledge workers (Tymon, Stumpf, & Doh, 2010). Human capital is any business' most crucial element (Mayo, 2001), making development and correct people management critical. The war of talent is proving to be a challenge for all organisations around the world and therefore

leaders are required to play a crucial role (Dawes & Bozkurt, 2010; Scullion, Caliguiri, & Collings, 2008).

Effective leadership plays a key role in the success, survival and prosperity of organisations (Day & Antonakis, 2012; Druskat & Wheeler, 2003). Due to the expansion of technology and knowledge as well as globalisation and the changing demographics, leaders are under intense pressure to contribute to organisational success (Dawes & Bozkurt, 2010). Leadership effectiveness has been traditionally defined as the skill and capacity to influence others (Yukl, 2002). The dynamics of work continue to evolve; hence leaders should view leadership differently (Shuck & Herd, 2012). Leadership has evolved from leadership as a control mechanism to leadership as a source of inspiration and employee growth, with employees paying more attention to concepts such as meaningful work, empowerment and authenticity (Fairle, 2011; Northouse, 2012; Yukl, 2002).

There is a call for leaders who will be able to motivate and elicit the talents of those who work around them. Employees need an empowered approach, namely leaders who can understand that employees prefer and need ownership and empowerment in order to grow emotionally and intellectually (Bhatnager, 2005; Nykodym, Ariss, Simonetti, & Plotner, 2000). The challenge thus greatly lies with leaders' abilities to empower as opposed to merely control.

Empowerment is a popular management practice; it refers to leader behaviours that highlight the importance of work, show confidence in employee performance and involve them in decision making (Ahearne, Mathieu, & Rapp, 2005; Zhang & Bartol, 2010). Empowerment involves motivating employees through the delegation of authority, allowing employees at lower levels to make valuable decisions (Conger & Kanungo, 1988; Thomas & Velthouse, 1990). Ongori (2009) defines empowerment as the transfer of power from the employer to the employees. Most definitions of empowerment refer to some aspects of power and control over decisions, systems and processes, deliverables and measurement thereof as well as control over people (Appelbuam, Hebert, & Leroux, 1999). Empowering leaders guide their employees towards independent problem solving which in turn prompts them to acquire new information and expertise (Chuang, Jackson, & Jiang, 2013).

Appelbaum and Honeggar (1998) believe that empowerment exists when subordinates feel that they are trusted with exercising initiative in good faith on behalf of the organisation, even if it falls outside the bounds of their normal responsibilities; and if their initiative should lead to a mistake, they trust that they would not be arbitrarily punished for having made an effort by taking initiative.

According to Buckle (2003), the organisation benefits immensely from the advantages of empowerment such as increased output, performance and motivation, quality products and services, lowered absenteeism and turnover, and more resourceful employees; whereas the advantages for the individual are job satisfaction, commitment, energy, high performance and willingness to learn. There are different perspectives on empowerment and each of these perspectives plays an important role in the development of a theory of empowerment. Spreitzer (2007) distinguishes between social-structural, psychological and leadership empowerment.

The social-structural perspective of empowerment focuses on the sharing or redistribution of authority and delegation of power between superiors and subordinates, with the goal of filtering relevant decision-making power to lower levels of the organisation in order for employees to have the ability to make a difference and be creative in tasks performed (Arciniega & Menon, 2013; Cloete, Crous, & Scheepers, 2002; Eylon & Bamberger, 2000; Liden & Arad, 1996; Menon, 2001**).** Psychological empowerment refers to an individual's experience of intrinsic motivation that is based on cognitions about him- or herself in relation to his or her work role as well as the perceived ability to exercise some control over his or her work life (Spreitzer, 1995). It is seen as a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness; therefore increasing motivation (Conger & Kanungo, 1988; Thomas & Velthouse, 1990).

Leader empowerment behaviour is defined as leader behaviours involving the delegation of authority and responsibilities to followers (Hakimi, Van Knippenberg, & Giessner, 2010). Leadership empowerment is characterised by the delegation of power to employees and, by doing it, decentralises decision making in the organisation. Leadership empowerment

behaviour creates an environment which fosters success, because employees are empowered through being given greater responsibility (Carson & King, 2005). Empowerment fosters confidence, enabling individuals to step forward and handle situations effectively without hesitancy or need for approval (Nykodym, Ariss, Simonetti, & Plotner, 2000).

Several studies have been done indicating the significance of leadership empowerment behaviour. These studies demonstrate how empowering leadership leads to various outcomes which in turn contribute to the bottom line of every organisation. A study by Albrecht and Andreetta (2010) showed how empowering leadership influences employee empowerment, which in turn influences employee engagement, affective commitment and turnover intention. A South African study by Dhladhla (2011) examined the collective effects of perceived leader behaviour, psychological empowerment, job satisfaction and organisational commitment on turnover intention. A study in a mining environment indicated a negative correlation between leadership empowering behaviours and intention to leave (Mare, 2007). A positive relationship was found between leader empowering behaviour and psychological empowerment, organisational commitment and job satisfaction (Bordin, Bartram, & Casimir, 2007; Dwyer, 2007; Hartmann, 2003). Mendes and Stander (2010) indicated a positive correlation between leader empowering behaviour, role clarity and engagement. Furthermore, Hunter (2010) indicated a significant positive relationship between leadership empowerment and self-determination. Van Schalkwyk, Du Toit, Bothma, and Rothmann (2010) indicated that leadership empowerment behaviour correlated negatively with job insecurity and intention to leave. From this, it then becomes clear that leadership empowerment is a key that leads to various constructs contributing to the effectiveness of organisations.

The above discussion indicated that a need exists for more empirical research on leadership empowerment and, more specifically, a measurement tool that can be used to assess the level of leadership empowerment of employees in South African organisations. However, such a tool has to be proven reliable and valid in South Africa. No extensive studies have been reported regarding the reliability and validity of a measuring instrument of leadership empowerment behaviour in South Africa. If leadership empowerment can be measured in a

reliable and valid manner, interventions can be implemented to promote the empowerment of employees; thus resulting in greater performance and job satisfaction.

Various studies in South Africa had been conducted on leadership empowerment behaviour using the same instrument in samples with fewer than 300 respondents. The following factor structures were reported: Stander & Rothman (2009) found a two-factor model in a study done in the educational sector; a one-factor structure was reported by Hunter (2010) in a petrochemical organisation as well as Stander (2007) in a study done in selected organisations; and Mare (2007) reported a six-factor structure in a study done within a gold mine. These mentioned studies give an indication that there is no common factor structure due to the small samples previously used. Many studies have been done, but no study has focused extensively on validity and reliability.

Based on the literature, three frequently used questionnaires have been developed that measure leadership empowerment behaviour. The first one is by Arnold, Arad, Rhoades, and Drasgow (2000). This questionnaire consisted of eight categories of leader behaviours for empowered teams, which are: Leading by example; coaching; encouragement; participative decision making; informing; showing concern; interacting with the team; and group management. The second one by Pearce and Sims (2002) consisted of three constructs, namely encouraging independent action, opportunistic thinking and self-development.

The third questionnaire was developed by Konczak, Stelly, and Trusty (2000). This questionnaire was developed with the aim of identifying leader behaviours associated with employee empowerment and to develop a measure to be used in the context of a leader development program. This questionnaire was developed and validated in the United States of America, but limited validity research has been done in a South African context. The theoretical framework of this study is based on the fact that researchers interested in empowerment focused their attention on construct definition and explication of the antecedents and consequences of empowerment.

There are six facets of leader empowering behaviour as described by Konczak et al. (2000). First is delegation of authority which refers to managers sharing power with subordinates,

allowing them to make valuable decisions (Hakimi et al., 2010). To empower involves the granting of power or delegation of authority, which in turn should increase intrinsic motivation by influencing task assessment related to meaning, self-determination and impact. The second dimension is accountability which highlights that empowerment redistributes power by giving people clear goals, but also provides a tool by which teams and individuals are held accountable for outcomes (Ford & Fottler, 1995; Hakimi et al., 2010; Konzack et al., 2000). The third dimension is self-directed decision making. This refers to the degree to which managers encourage independent decision making, aiding their employees with the opportunity to solve problems; thus allowing followers to take the lead (Konzack et al., 2000; Van Dierendonck & Dijkstra, 2012). The fourth dimension is information sharing. Empowerment requires superiors to share information and knowledge that allow subordinates to add value to the organisation's overall performance (Van Dierendonck & Dijkstra, 2012). The fifth dimension of empowerment is skills development. It is essential that managers spend sufficient time on securing appropriate training to ensure that employees develop skills needed to support empowerment efforts (Hakimi et al., 2010). The final dimension of leadership empowerment is coaching for innovative performance which includes leader behaviours that encourage calculated risk taking and creating new ideas, provide performance feedback, and treat mistakes and setbacks as opportunities to learn from (Konzack et al., 2000).

The gender-based theory was utilised to derive predictions of how gender would be associated with preferences for idealized styles of supervision, as gender influences people's experience of leadership empowerment behaviour (Vecchio & Boatwright, 2002). Key gender differences have been recognised by gender stereotypes. These stereotypes are important for understanding perceptions of men and women regarding leadership traits and behaviours (Scott & Brown, 2006). Men are considered to worship hierarchy, may be seen as dominant and forceful at times, with increased ambition and logic. The dominant behaviour for men is to display a desire to be in positions of power and to self-expand (Konrad, Ritchie, Lieb, & Corrigall, 2000). On the contrary, women are considered to be the nurturers, being unselfish and understanding. They may mostly enjoy cooperation, interdependence and are accepting of change. Women usually have a collective in approach in their work. Based on

this theory, one objective of this study is to determine the differences in the perception of leadership empowerment behaviour between men and women; the other is to also validate this study.

The objective of this study is, therefore, to determine the construct validity and reliability of the Leadership Empowerment Behaviour Questionnaire (LEBQ) for employees in selected organisations in South Africa and, furthermore as part of the process, assess it amongst different gender groups.

1.2 RESEARCH QUESTIONS

Based on the above problem statement, the following research questions were formulated:

- How is leadership empowerment behaviour conceptualised in literature?
- What are the validity and reliability of the Leadership Empowerment Behaviour Questionnaire in selected organisations in South Africa?
- Are there differences between different gender groups in terms of their perception of leadership empowerment behaviour?
- What recommendations can be made for future development, research and practice?

1.3 RESEARCH OBJECTIVES

1.3.1 General and Specific Objectives

The general objective of this study was to determine the construct validity and reliability of the Leadership Empowerment Behaviour Questionnaire (LEBQ) for employees in selected organisations in South Africa. The specific objectives were to:

- Conceptualise the construct leadership empowerment behaviour in literature.
- Investigate the validity and reliability of the Leadership Empowerment Behaviour Questionnaire (LEBQ) in selected organisations in South Africa.
- Evaluate if there are differences between different gender groups in terms of their perception of leadership empowerment behaviour.

- Make recommendations for future development, research and practice.

1.4 RESEARCH METHOD

The research method consisted of two phases, namely a literature review and an empirical study. The results were presented in the form of an article.

In phase 1, a complete review regarding leadership empowering behaviour was done. Articles relevant to the study and that have been published between 1989 and 2013 were obtained by doing computer searches via databases such as Academic Search Premier; Business Source Premier; PsycArticles; Psycinfo; Ebscohost; Emerald; Proquest; SACat; SAePublications; Science Direct; and Nexus. The following major journals were consulted as a result of their relevance to the topic of interest: *Journal of Managerial Psychology*, *Human Resource Management*, *Journal of Vocational Behaviour*, *Journal of Personality and Social Psychology*, *International Journal of Hospitality Management*, *Journal of Applied Psychology*, *The International Journal of Human Resource Management*, *South African Journal of Psychology*, *Journal of Business and Psychology*, *Work & Stress*, *Psychology in Spain*, *Applied Psychology: An International Review*, *Educational and Psychological Measurement*, *Organizational Behaviour and Human Decision Processes*, *Academy of Management Journal*, *Journal of Organizational Behaviour*, *Academy of Management Review*, *Journal of Managerial Psychology*, *Employee Responsibilities and Rights Journal*, *South African Journal of Industrial Psychology*, *Journal of Leadership & Organizational Studies*, *Journal of Management Research*, *The Indian Journal of Industrial Relations*, *Psychological Bulletin*, *Human Relations*, *Electronic Journal of Sociology*, and *Personnel Psychology*.

The empirical study consisted of the research design, research participants, research procedure, measuring instruments and the statistical analysis using SPSS 21 (IBM Corporation, 2012) and Mplus (Muthén & Muthén, 2010).

1.4.1 Research Design

A quantitative, cross-sectional design was used in this study. Research that is quantitative in nature is a form of conclusive research involving large representative samples and structured data collection procedures (Struwig & Stead, 2007).

1.4.2 Research Participants

The database comprised a sample of (N = 1022) people from the education, petrochemical and manufacturing industries.

1.4.3 Measuring Instruments

The *Leadership Empowerment Behaviour Questionnaire* (LEBQ) was developed by Konczak et al. (2000) and is aimed at providing leaders with feedback regarding employees' behaviour that relates to employee empowerment. The original instrument consists of 17 items, and is scored on a 7-point Likert scale, ranging from 1 *(strongly disagree)* to 7 *(strongly agree).* A typical item is "My manager delegates authority to me that is equal to the level of responsibility that I am assigned" (Konczak et al., 2000, p. 307). Two items were added from Arnold et al. (2000), with the aim of increasing the number of items that demonstrated the information-sharing dimension. These items were: "My manager explains his/her decisions and actions to my work group" and "My manager shares company goals with my work group". A high score signified high leadership empowering behaviour. In previous research (Konzack et al., 2000), the interfactor correlations ranged from 0.40 to 0.88, whilst a Cronbach alpha coefficient of 0.82 to 0.88 was found for reliability. The revised six-factor model was tested and yielded a much better fit. In fact, all fit indices showed improvement and supported the revised six-factor model. The interfactor correlations ranged from 0.48 to 0.87. All coefficients were greater than 0.78 (Konczak et al., 2000).

1.4.4 Statistical Analysis

The analysis was carried out using IBM-SPSS 19.0 program (Field, 2013) and Mplus statistical modelling program (Muthèn & Muthèn, 2010). Descriptive statistics (mean and

standard deviations) were computed to describe the data. The reliability of the LEBQ was assessed by means of Confirmatory Factor Analysis (CFA) based reliability index, where values above 0.70 indicate reliability (Gu, Little, & Kingston, 2013; Streiner, 2003; Wang & Wang, 2012). CFA was used to confirm the theoretically-intended factor solution (Byrne, 2012) as an indication of construct validity. Structural equation modelling, as implemented in Mplus (Byrne, 2012; Muthèn & Muthèn, 2010), was used to test the factorial models of the LEBQ by using maximum likelihood analyses.

The following indices produced by Mplus were used in this study: the Chi-square statistic, which is the test of absolute fit of the model; the Comparative Fit Index (CFI); the Tucker-Lewis Index (TLI); the Root-Mean-Square Error of Approximation (RMSEA); and the Standardized Root-Mean-Square Residual (SRMR) (Byrne, 2012). Values close to 0.95 for TLI and CFI indicate good model fit. Values close to 0.06 indicate acceptable fit for RMSEA, while values smaller than 0.8 are acceptable for SRMR (Byrne, 2012; Hu & Bentler, 1999). In addition, the researcher used Akaike's Information Criterion (AIC) and Bayes Information Criterion (BIC) in order to compare competing measurement models, where smaller values indicate a better fit (Byrne, 2012).

Measurement invariance was used to compare male and female responses; a series of increasingly restrictive measurement invariance tests will be performed. The most crucial tests are for configural, scalar and metric invariance (Dimitrov, 2010; Chen, Sousa, & West, 2005; Cheung & Rensvold, 2002). Configural invariance tests evaluate whether the same overall factor structure holds for the two comparison groups. Metric invariance tests the degree to which the relation between the items and the factors is identical across two groups. Scalar invariance tests if item intercepts are the same, which indicates whether there are systematic differences in group responses (Haroz, Ybarra, & Eaton, 2014; Lavoie & Douglas, 2012).

1.4.5 Research Procedure

Ethical guidelines were followed and research was approved by the ethics committee (reference number NWU FH-SB-2012-0021). Informed consent was obtained from the

organisations and individuals. Participation was voluntary and confidentiality was maintained throughout this research.

1.5 ETHICAL CONSIDERATIONS

Ethical considerations that guided this research study included ensuring that the researcher who collected the information had obtained consent from the companies as well as the participants. In this process anonymity and confidentiality were ensured. The researcher took extra care not to inflict harm and respected the rights and dignity of all parties involved. The research proposal was submitted to the Research Ethics Committee of Optentia Research Focus Area at the NWU and was approved prior to the commencement of the study.

1.6 CHAPTER DIVISION

Chapter 1: Introduction

Chapter 2: Research Article

Chapter 3: Conclusions, Limitations and Recommendations

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CHAPTER 2

RESEARCH ARTICLE

The Psychometric Evaluation of a Leadership Empowerment Questionnaire in Selected Organisations in South Africa

ABSTRACT

The aim of this study was to explore the psychometric properties of a Leadership Empowerment Behaviour Questionnaire (LEBQ). In addition to validating this questionnaire, the study investigated the differences between genders regarding male and female perceptions of leadership empowerment behaviour. A quantitative cross-sectional survey comprising 1022 employees in the petrochemical, educational and manufacturing industries was applied. A three-factor structure of the LEBQ was confirmed. The three factors are autonomy, development and accountability. Measurement invariance was used to determine differences between males and females regarding leadership empowerment behaviour and no real differences were evident among these groups. Three items differed, but the overall model remained the same. Recommendations for organisation and future research were made.

Key words: Empowerment, leadership empowerment questionnaire, validation, construct validity, internal consistency.

For years the issue of human capital being the key source of business success has been an on-going discussion in boardrooms. It is generally known that the value of many organisations can be found in the firm's intangible assets, which include intellectual capital and human capital (Bontis, 2001; Murale & Jayaraj, 2010). It is argued that employees generate their intellectual resources through their capability, attitude towards their work and their sense of urgency; thus making employee development and involvement in decision making critical (Murale & Jayaraj, 2010). Conversely, it is held that the lack of proper people management is becoming an epidemic facing organisations (Sabir, Sohali, & Khan, 2011).

In the era of globalisation, rapid changes in technology and increased competition create a need for positive leadership, which entails leaders with clear vision and the belief that success and excellence require adaptation to external changes; also recognising the importance of human capital (Mohammad, AL-Zeaud, & Batayneh, 2011). Forms of positive leadership are

transformational-, authentic- and empowering leadership. A transformational leader has a higher moral ground and the interests of the group take precedence. These leaders have courage, openness, values continuous learning, and they are visionary (Sabir et al., 2011). Authentic leaders utilise a balanced approach by seeking adequate input and perspective from subordinates, being equally positive and negative before making important decisions (Sabir et al., 2011). They exercise a great level of transparency and honesty that encourage employees to be forthcoming with their thoughts, challenges, and views (Wong & Laschinger, 2012). Empowering leadership encourages the employee to develop self-management and self-leadership abilities. Leaders lead others to lead themselves (Pearce & Sims, 2002).

Leaders who empower their people can positively influence the manner in which knowledge is shared, as well as the way teams work together; having a positive impact on performance (Bass, Avolio, Jung, & Berson, 2003; Srivastava, Bartol, & Locke, 2006). The behaviour of a leader affects levels of employee engagement; hence, requiring leaders to form relationships with others by generating a shared purpose and mission (Lewis, 2010). The concept of empowerment, as derived from the "theories of participative management and employee involvement, promotes the idea that leaders should share decision-making processes and power with their subordinates. This would remove the conditions of powerlessness and allow subordinates to be flexible as circumstances warrant" (Van Dierendonck & Dijkstra, 2012, p. 13).

Employees who are given sufficient control, authority and increased responsibility to manage their own work feel comfortable experimenting with and innovating facts and figures, rather than being constantly managed and supervised by their superiors. It is therefore important to allow them to act autonomously in all their acquisitions (Kuo, Lai & Lee, 2011; Pertusa-Ortega, Zaragoza-Saez, & Claver-Cortes, 2010).

The organisational empowerment literature differentiates empowerment into three broad categories, namely the structural approach, the psychological approach and the leadership approach. Structural empowerment could be seen as granting power, autonomy and authority to subordinates (Kuokkanen & Leino-kilpi, 2000; Menon, 2001; Spreitzer, 1995). Psychological empowerment is described from the point of view of the individual, where it is seen as a process of personal growth and development leading to the individual being psychologically enabled.

Psychological empowerment consists of four cognitions: Meaning, competence, self-determination and impact (Spreitzer, 1995; Thomas & Velthouse, 1990). Its focus lies in employees' perceptions or cognitive states regarding empowerment (Conger & Kanungo, 1988; Thomas & Velthouse, 1990). Leadership empowerment focuses on the energising of subordinates as well as providing a clear vision for the future (Menon, 2001). It is essential that an empowerment culture is created through fostering the sharing of information; creating autonomy through boundaries; building team accountability, support and encouragement; and creating opportunities for development (Blanchard, Carlos, & Randolph, 1995).

Certain personal characteristics have an impact on how individuals perceive leadership empowerment behaviour. People of different genders as well as different ages tend to experience empowerment differently. Dickson, Smith, Grojean, and Ehrhart (2001) indicated how an individual's personal values shape how he/she experiences leadership. However, these values are also seen as being influenced by gender and age (Jensen, White, & Singh, 1990). Women have proven to be more concerned about the interpersonal treatment, which could be seen as the people development element; whereas males are more concerned about the outcomes which speak to being given the authority to make decisions and thereafter stand accountable for results (Buttner, 2004; Woolley, Caza, & Levy, 2010). Research has indicated that leadership empowerment behaviours such as skills development, positive feedback and support yield a greater level of satisfaction among younger employees (Amorose & Horn, 2000; Horn, 2002).

Leadership Empowerment Behaviour

With the importance of leadership empowerment highlighted above, the measurement tool used to measure empowerment is even more vital. Based on literature, three major questionnaires have been developed that measure leadership empowerment behaviour. The first one by Arnold et al. (2000) consists of eight categories of leader behaviours. The second measure by Pearce et al. (2002) measures three factors around leadership empowerment. The last questionnaire by Konczak et al. (2000) consists of six constructs measuring leadership empowerment behaviour. All these questionnaires measure similar constructs, such as self-directed decision making, coaching as well as sharing of information. Arnold, Arad, Rhoades & Drasgow. (2000) identified four other distinct constructs, namely leading by example, encouragement, showing concern and

interacting with the team management. Pearce & Sims. (2002) identified opportunistic thinking and self-development, whilst Konzack et al. (2000) identified delegation of authority, accountability and skills development.

According to Konzack et al. (2000), *delegation of authority* is one of the dimensions of empowering behaviour. This is a distinct type of power-sharing process whereby the employee is given complete authority to make decisions that would normally be carried out at management level (Yukl, 2006). Delegation is seen as giving the employee new responsibility and the power to fully execute those responsibilities (Weshah, 2012). Yukl (2006) indicated that empowerment and delegation of authority "offers a number of potential advantages if carried out in an appropriate manner. It improves decisions' quality; greater subordinate commitment to implement decisions effectively and increases job satisfaction" (p. 100).

Accountability is defined as "an implicit or explicit expectation that one's decisions or actions will be subject to evaluation by some salient audience with the belief that the potential exists for one to receive either rewards or sanctions based on the expected evaluation" (Hall, Royle, Brymer, Perrewe, Ferris, & Hochwarter, 2006, p. 33). Research indicates that accountability yields potential benefits to the organisation, such as motivation and job performance (Enzle & Anderson, 1993).

Self-directed decision making could be seen as allowing employees to participate in decision making, also sharing decision making with others in order to achieve organisational goals and improve performance (Knoop, 1995; Scott-Ladd, Travaglione, & Marshall, 2005). Self-directed decision making would include delegation of responsibility to the lower levels and giving employees the autonomy to make their own decisions. In this way the employee has considerable discretion in deciding how certain tasks are carried out (Langfred & Moye, 2004; Leach, Wall, & Jackson, 2003).

Information sharing is seen as significant in empowerment. "Empowerment will develop and a team will become self-oriented only if the top managers are willing to share sensitive financial information, market shares, further opportunities, and even competitive strategies with team members; the sharing of this information is beneficial in that it helps employees understand the business operations, establishes trust and mutual relationships, and creates the potential for self-

management" (Si & Wei, 2012). Stander and Rothman (2008) indicate that leaders should outline clear outcomes, provide a plan of action for the future and provide information that enables employees to reach those outcomes.

Skills development and coaching for innovative performance are seen as *people development.* Managers are seen as genuine and relationships are built when they show a key interest in their employees' development (Knobel, 2008). People development includes leaders' behaviours that encourage calculated risk taking and new notions; provide feedback, positive or negative; and treat mistakes and setbacks as opportunities to learn from (Konzack et al., 2000). Managers who spend time on people development will enhance the self-determination of employees and their interest in their work (May, Gilson, & Harter, 2004).

The importance and impact of leadership empowerment can be derived from Table 1, which gives a summary of some research published on the relationship between leadership empowerment behaviour and other constructs since 2000.

Based on the empirical evidence gathered from previous studies leadership empowerment behaviour is considered to have a positive impact on factors such as job satisfaction, work engagement, psychological empowerment and others described in Table 1. This further confirms the importance of leadership empowerment behaviour within organisations.

Table 1

Constructs Correlating with Leadership Empowerment Behaviour

	Work Engagement	Organisational Commitment	Turnover Intention	Job Satisfaction	Role Clarity	Structural Empowerment	Team/individual Empowerment	Psychological Empowerment
Albrecht & Andreetta (2010)	X	X	X					X
Boudrias (2009)								X
Carmeli, Schaubroeck, & Tishler (2011); Tung & Chang (2011)							X	
Dewettinck & Ameijde (2010)		X		X				
Dhladla ((2011)		X	X	X				X
Greco, Laschinger, & Wong (2006)	X		X			X		
Mare (2000)	X				X			X
Slatten, Svensso, & Svaeri (2011)						X		
Srivastava, Bartol, & Locke (2006)		X		X				
Stander & Rothman, Van Schalkwyk, Du Toit, Botma & Rothman(2010)			X	X				
Vecchio, Justin & Pearce(2010)								

Measuring Leadership Empowerment Behaviour

The development of the original Leadership Empowerment Behaviour Questionnaire by (Konzack et al., 2000) will be further discussed.

Method: The data used in the original study was collected from 1309 direct reports that rated 424 managers participating in a leadership training program. The subordinates were asked to complete the LEBQ anonymously to provide feedback to the managers during the leadership program. At least three direct reports completed the LEBQ for each manager. The 424 managers represented three management levels, namely vice presidents and directors (31%), managers (44%), and supervisors (16%). Data concerning the organisational level of the remaining managers (9%) were not available. Many functional areas within the organisation were represented, with the majority of managers from the areas of administration (12%), marketing (15%), and sales (27%).

Measures and Analyses: The initial version of the LEBQ consisted of 21 items with seven three-item scales representing the seven proposed dimensions of leader-empowering behaviour, namely delegation of authority, accountability, encouragement of self-directed decision making, encouragement of self-directed problem solving, information sharing, skills development and coaching for innovative performance. Items were measured on a 7-point Likert-type scale ranging from 1 *(strongly disagree)* to 7 (*strongly agree*).

Results and Discussion: Means, standard deviations and reliability coefficients were computed on the hypothesised model. Mean scores ranged from 4.83 (sd = 0.93) to 5.90 (sd = 1.30), indicating that the participants generally felt that their supervisors engaged in empowering behaviours. Cronbach's alpha coefficients were computed for the data and ranged from 0.82 to 0.88, with the exception of one dimension, namely encouragement of self-directed problem solving, which attained a coefficient of 0.70. The initial confirmatory factor analysis resulted in a marginally acceptable model fit. Specifically two of the three fit indices were less than 0. 90, CFI = 0. 93, GFI = 0. 85 and AGFI = 0. 80. The root mean squared residual (RMSR) was.12, compared to the recommended .05 or less. Finally, the χ^2 statistic was 433.01 (*df* = 168).

To enhance the model fit, Konzack modified the seven-factor model. The major aspect of the LEBQ revision involved combining three items from the original decision-making and problem-solving dimensions to form revised encouragement of self-directed decisions dimensions. All three these items focus on whether employees feel empowered to make their own decisions about issues related to their work. Furthermore, two of the original decision-making items were deleted, because these items appeared to be measuring participative decision making rather than the degree to which managers empowered employees to make their own decisions. The remaining problem-solving item, which dealt with whether managers encouraged the use of systematic problem-solving techniques, was reclassified as part of the skills development dimension. An item was deleted from the information-sharing dimension, because it differed from the other information-sharing items; dealing with whether a manager encourages subordinates to ask for needed information versus whether the manager actively shares work-related information that subordinates need in order to do their jobs effectively. A skills development item was also deleted because, unlike other LEBQ items, it did not contain a "my manager" stem and might not clearly have focused respondents on the task of rating their managers' behaviour (Konzack et al., 2000).

The revised six-factor model was tested and yielded a much better fit. In fact, all fit indices showed improvement and supported the revised six-factor model. The indices were as follows: CFI = 0.96, GFI = 0.90, AGFI = 0.86, RMSR = 0.08, χ^2 = 231.90, *df* = 104. The interfactor correlations ranged from 0.48 to 0.87. All coefficients were greater than 0.78. All alpha reliability coefficients for the scores on the six dimensions were acceptable, ranging from 0.80 to 0.91. A single-factor model was also examined to exclude the possibility that the LEBQ was measuring a unitary construct. As expected, fit indices for the single-factor solution indicated poor model fit (Konzack et al., 2000).

Table 2

Constructs and Items of the Leadership Empowerment Questionnaire

Leadership Empowerment Behaviour	
Delegation of Authority	My manager gives me the authority I need to make decisions that improve our work processes and procedures. My manager gives me the authority to make changes necessary to improve things. My manager delegates authority to me that is equal to the level of responsibility that I am assigned.
Accountability	My manager holds me accountable for the work I am assigned. I am held accountable for performance and results. My manager holds people in the department accountable for customer satisfaction.
Self-directed Decision Making	My manager tries to help me arrive at my own solutions when problems arise. My manager relies on me to make my own decisions about issues that affect how work gets done. My manager encourages me to develop my own solutions to problems I encounter in my work.
Information Sharing	My manager shares information I need to ensure high quality results. My manager provides me with the information I need to meet customer needs. My manager explains his/her decisions and actions to my work group. My manager explains company goals to my work group.
Skills Development	My manager encourages me to use systematic problem solving methods. My manager provides me with frequent opportunities to develop my skills. My manager ensures that continuous learning and skills development are priorities in our department.
Coaching for Innovative Performance	My manager is willing to risk mistakes on my part if, over the long term, I will learn and develop as a result of the experience. I am encouraged to try out new ideas even if there is a chance that they might not succeed. My manager focuses on corrective action rather than placing blame when I make a mistake.

Source: Arnold et al. (2000) and Konzack et al. (2000)

Research highlights an on-going discussion about how gender has an impact on perceptions of leadership (Ahmad, 2008; McColl-Kennedy & Anderson, 2005; Vecchio & Brazil, 2007). It has been indicated that the process of leadership has been affected immensely by gender differences (Antonakis, Avolio, & Sivasubramaniam, 2003; Eagly, Johannesen-Schmidt, & Van Engen, 2003). The gender-based theory has also advocated to the fact that gender plays a role in people's experience of leadership empowerment behaviour; this being due to the different stereotypes associated with men and women (Vecchio & Boatwright, 2002). Women are shown to consider interpersonal treatment by the people in authority a priority; whilst men are more concerned with achieving results as opposed to building solid relationships (Buttner, 2004). Furthermore, men have a strong need for achievement; thus being highly competitive in the work environment. Women, on the other hand, have a strong need for being nurtured and are driven by their collaborative nature (Bellou, 2011; Eagly & Wood, 1991; Konrad, Ritchie, Lieb, & Corrigall, 2000). Therefore, based on this research, this study aims to evaluate gender differences regarding their perception of leadership empowerment behaviour.

Based on the above discussion, the following hypotheses have been formulated:

Hypothesis 1**:** Leadership empowerment, as measured by the LEBQ, is a six-dimensional construct (delegation of authority, accountability, self-directed decision making, information sharing, skills development and coaching for innovative performance).

Hypothesis 2**:** The LEBQ and its subscales have acceptable levels of internal consistency.

Hypothesis 3**:** Gender groups differ in their perception of leadership empowerment behaviour.

Method

Research Design

A quantitative, cross-sectional design was used in this study. Research that is quantitative in nature is a form of conclusive research involving large representative samples and structured data collection procedures (Struwig & Stead, 2007).

Participants

A convenience sample of 1022 coded responses was drawn from an existing database. The sample includes participants from the petrochemical (49%), manufacturing (18%) and education (31%) sectors. Table 3 describes the characteristics of the sample. It indicates that 62% of the participants were male and 38% were females. The majority of the participants (30%) were between the ages of 25-35 years. Most of the participants had academic qualifications beyond grade 12. The proportion of the sample with post-grade 12 education was 64%.

Table 3

Characteristics of the Participants (N = 1022)

Item	Category	Frequency	Percentage
Gender	Male	628	62
	Female	387	38
Age	<24	62	6
	25-35 years	305	30
	36-45 years	239	24
	46-55 years	269	27
	56+ years	127	13
Education	Grade 11	90	9
	Grade 12	272	27
	Diploma	215	21
	Degree	164	16
	Degree+	268	27
Industry	Petrochemical	502	49
	Manufacturing	201	18
	Education	319	31

Measuring Instrument

The *Leadership Empowerment Behaviour Questionnaire* (LEBQ) was developed by Konzack et al. (2000) and is aimed at providing leaders with feedback regarding employees' behaviour that relates to employee empowerment. The instrument consists of 17 items and is scored on a 7-point Likert scale, ranging from 1 *(strongly disagree)* to 7 *(strongly agree).* The interfactor correlations ranged from 0.48 to 0.87. All alpha reliability coefficients were acceptable, ranging from 0.80 to 0.91. Two information-sharing items by Arnold et al. (2000) were added, namely "My manager explains his/her decisions and actions to my work group" and "My manager

explains company goals to my work group". The original questionnaire had only two items for information sharing; as a result limiting the effective use of the construct.

Research Procedure

Ethical guidelines were followed and the research was approved by the ethics committee. Informed consent was obtained from the organisations and individuals. Participation was voluntary and confidentiality was maintained throughout this research

Statistical Analysis

The analysis was carried out using IBM-SPSS 19.0 program (Field, 2013) and Mplus statistical modelling program (Muthèn & Muthèn, 2010). Descriptive statistics (mean and standard deviations) were computed to describe the data. The reliability of the LEBQ was assessed by means of CFA-based reliability index, where the values above 0.70 indicate reliability (Gu, Little, & Kingston, 2013; Wang & Wang, 2012). Confirmatory factor analysis was used to confirm theoretically-intended factor solution (Byrne, 2012) as an indication of construct validity. Structural equation modelling, as implemented in Mplus (Byrne, 2012; Muthèn & Muthèn, 2010), was used to test the factorial models of the LEBQ by using the maximum likelihood analyses.

The following indices produced by Mplus were used in this study: the Chi-square statistic, which is the test of absolute fit of the model, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root-Means-Square Error of Approximation (RMSEA), and the Standardized Root-Mean-Square Residual (SRMR) (Byrne, 2012). Values close to 0.95 for TLI and CFI indicate good model fit. Values close to 0.06 indicate acceptable fit for RMSEA, while values smaller than 0.08 are acceptable for SRMR (Byrne, 2012; Hu & Bentler, 1999). In addition, the researcher used Akaike's Information Criterion (AIC) and Bayes Information Criterion (BIC) to compare competing measurement models, where smaller values indicate a better fit (Byrne, 2012).

Measurement invariance was tested, and a series of increasingly restrictive measurement invariance tests were performed. The purpose was to compare the responses of two groups. The most crucial tests are for configural, scalar and metric invariance (Dimitrov, 2010; Chen et al.,

2005; Cheung & Rensvold, 2002). Configural invariance tests evaluate whether the same overall factor structure holds for the two comparison groups. Metric invariance tests the degree to which the relation between the items and the factors is identical across two groups. Scalar invariance tests if item intercepts are the same, which indicates whether there are systematic differences in group responses (Haroz et al., 2014; Lavoie & Douglas, 2012).

Results

Two psychometric properties for the LEBQ (Konzack et al., 2000) were examined in the petrochemical, manufacturing and education groups. First, construct validity was explored by examining the factor structure using EFA and then CFA. In addition to these two properties, measurement invariance was tested for the two gender groups. Secondly, the CFA-based reliability index (rho) for the total scale and the separate sub-scales was computed. These results will be discussed in reference to the hypotheses of this study.

Construct validity. The data was randomly split into two parts in order to conduct exploratory and confirmatory analyses. Firstly, exploratory factor analysis was specified and applied to a randomly selected data set of 506 participants. The data was explored in terms of different factor structures to find the best model. The items loaded onto only three significant factors, leading the researcher to using the three-factor structure, namely development, delegation of authority and accountability.

Secondly, CFA was conducted. In the total data set, four models were tested; one being the model that showed good fit in the EFA and the other three being competing models. These models are reported in Table 4. Literature and the content of the items supported the grouping of these factors. Model 1 was a three-factor model consisting of development, autonomy and accountability. The three-factor solution was confirmed by three items that have been removed due to cross loadings. These items were: “My manager tries to help me arrive at my own solutions when problems arise, rather than telling me what he/she would do”, “My manager encourages me to use systematic problem-solving methods”, and “My manager is willing to risk mistakes on my part if, over the long term, I will learn and develop as a result of the experience”. This model attained acceptable fit indices (CFI = .92 and TLI = .91).

Model 2 was a one-dimensional first order structure. In this model all items were included to indicate one latent factor. This model attained a CFI = .81 and TLI = .78, indicating poor fit. Model 3 was a two-factor structure consisting of development and decision making. This model attained a CFI = .87 and TLI = .84, indicating poor fit. Model 4 was a representation of a three-factor structure and the latent variable were not allowed to correlate. This model attained a CFI = .79 and TLI = .77; thus indicating poor fit. Of the four models, Model 1 which consisted of three factors proved to be the best fit shown by the smaller AIC and BIC values. Hypothesis 1 could thus not be accepted.

Table 4

Fit Statistics of Competing Measurement Models of the LEBQ (N = 1022)

Model	$\Delta\chi^2$	Δdf	SRMR	TLI	CFI	RMSEA	AIC	BIC
Model 1	335.17	101	0.05	0.91	0.92	0.07	25446.48	25662.04
Model 2	693.65	104	0.07	0.78	0.81	0.11	26042.58	26245.45
Model 3	518.52	103	0.06	0.84	0.87	0.09	25748.83	25955.93
Model 4	732.55	104	0.33	0.77	0.79	0.01	26067.89	26270.76

df = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA= Root-Mean-Square-Error of Approximation

To compensate for the skewness of the data, the robust maximum likelihood estimator (MLR) was used, taking into account skewness and kurtosis of the data (see Table 5). Chi-squared values could not be directly compared as a result of the Satorra-Bentler chi-squared difference test, utilising the scaling correction factor to indicate the real differences of the actual chi-squared values.

Table 5

Difference Testing for Competing Structural Models

Model	$\Delta\chi^2$	Δdf	*p-value*
Model 1	169.68	3	<0.0001**
Model 2	89.50	2	<0.0001**
Model 3	357.94	3	<0.0001**

Satorra-Bentler was applied to the three competing models. All three models were compared against the three-factor model with the best fit. The results indicated an increase in the chi-squares; thus making the fit even worse. A schematic summary of the final best fitting model is presented in Figure 1.

Reliability. The CFA-based reliability index (rho) of the total scale and its dimensions attained satisfactory reliability indices, namely 0.96 for the total scale, 0.89 for autonomy, 0.91 for development, and 0.81 for accountability. Hypothesis 2, reliability for the 3-factor structure, was reliable and valid. This hypothesis can be accepted for a three-factor structure.

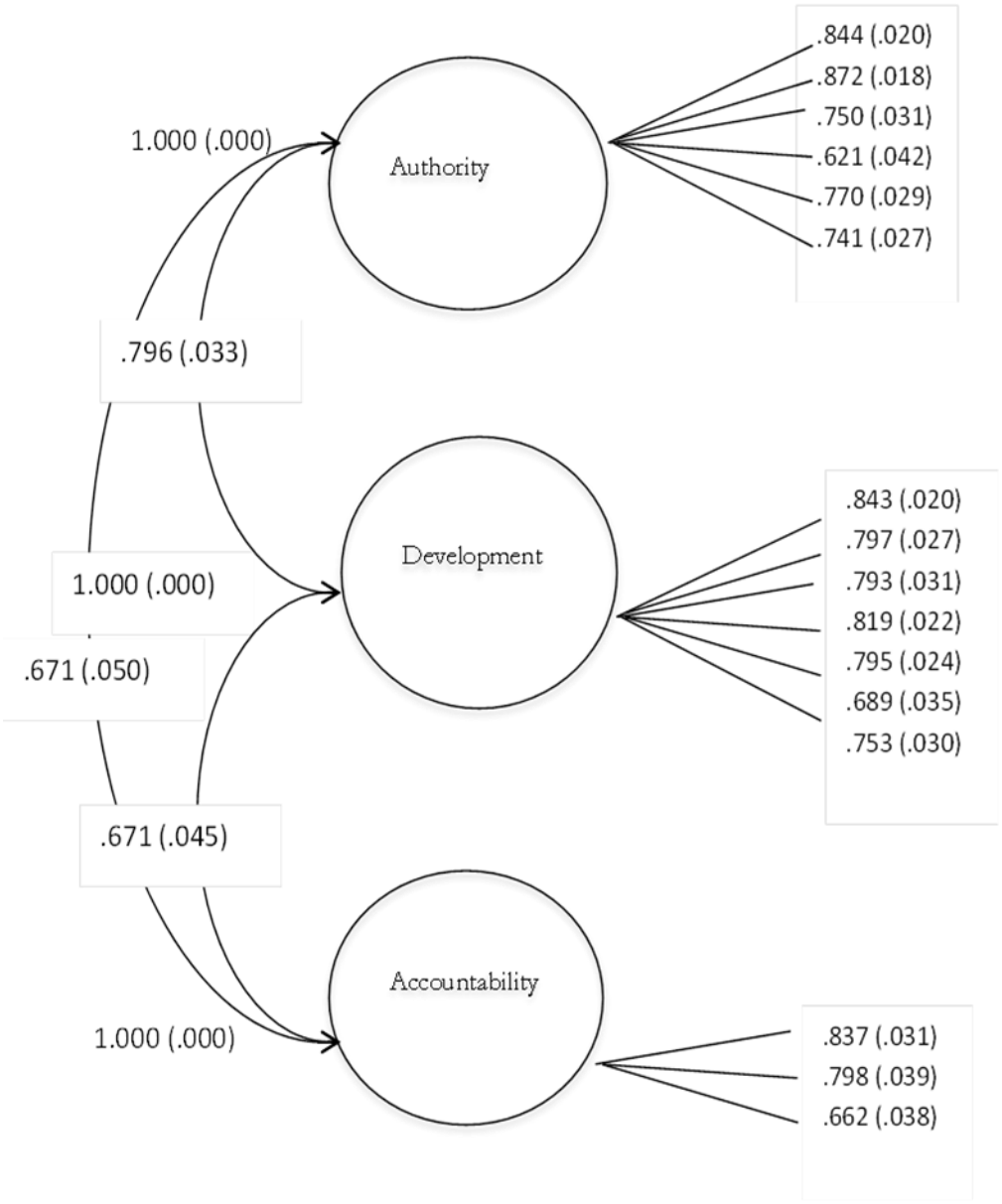

Figure 1: Final model of LEB structure

Measurement Invariance. Measurement invariance was used with the aim of testing for differences across groups. When testing for measurement invariance, the model fit was assessed for both males and females by looking at the overall fit statistics.

Table 6

Fit Statistics for Invariance Testing between Males and Females

Model	SRMR	TLI	CFI	RMSEA
Configural	0.05	0.91	0.92	0.07
Metric	0.05	0.92	0.92	0.07
Scalar	0.05	0.92	0.92	0.07

Configural Model

Firstly, configural invariance was tested to obtain a benchmark against which the adequacy of subsequent increasingly restrictive models of the data could be compared. The groups (males and females) were separated in order to find a model that fits well for each of them. The model that fitted both these groups separately was exactly the same, being a three-factor model. These two models were then combined in order to create a baseline against which to compare restricted models and to establish whether any differences were present. According to Table 6, this model attained acceptable fit indices RMSEA = .06; CFI = .92 and TLI= .91. It can also b**e** concluded that the three-factor structure obtained for the total sample also holds for the two groups of respondents separately. Because configural invariance was demonstrated across gender, further increasingly restrictive analyses to test the invariance of different models should be performed.

Table 7

Difference Testing for Invariance between Male and Female as Compared to Configural Model

Model	$\Delta\chi^2$	Δdf	*p-value*
Metric	10.48	13	<0.6543**
Scalar	58.76	29	<0.0009**
Strong 1	50.38	28	<0.0059**
Strong 2	42.72	27	<0.0279**
Strong 3	35.73	26	<0.0967**

Metric Model

Metric invariance testing was conducted. This form of invariance imposes restrictions on the configural model by forcing loading to be the same. The comparative fit indices all indicated an acceptable fit, RMSEA = .06, CFI = .92 and .91. When compared to the configural model, the fit statistics for the metric model showed no significant difference ($\Delta\chi^2$ = 10.48, Δdf = 13, *p*= 0.6543). A weak invariance was established, meaning that the relationships between responses to items and the underlying factor are not significantly different across groups. This indicates that the latent variables are measured in the same way with the same metric in the two target groups.

Scalar Model

Scalar invariance testing was conducted, where both factor loadings and intercepts are forced to be equal. Insignificant differences mean invariance, but if the differences are found to be significant, it needs to be established were the differences lie. The comparative fit indices all indicated an acceptable fit, RMSEA = .06, CFI = .91 and .91. When compared to the configural model, the fit statistics for the scalar model showed a significant difference ($\Delta\chi^2$ = 58.76, Δdf = 29, *p*= 0.0009). Strong measurement invariance was not found, but the groups had different intercepts on certain items. Modification indices were used to loosen up specific items individually with an aim of establishing partial strong invariance. During this process, the items with the highest modification values were the ones to be relaxed first. This was done with each

individual item until the differences from the configural model were no longer significant and partial strong (scalar) invariance was thus established.

The first item to be relaxed was LEB4 "My manager holds me accountable for the work I am assigned", as reported in Table 8. When compared to the configural model, it showed that $\Delta\chi^2$ = 50.38, Δdf = 28 and p= 0.0059, which was statistically significant; however, still not strongly invariant. The second item to be relaxed was LEB8 "My manager relies on me to make my own decisions about issues that affect how work gets done". When compared to the configural model, it showed that $\Delta\chi^2$ = 42.72, Δdf = 27 and p = 0.0279, which was statistically significant; however, still also not strongly invariant. The last item to be relaxed was LEB15 "My manager provides me with frequent opportunities to develop my skills". When comparing it to the configural model, it showed that $\Delta\chi^2$ = 35.73, Δdf = 26 and p= 0.0967, which is not statistically significant. Partial strong invariance was established. This indicates that on these three items, males and females differ on their starting points when responding to these questions. Although there were differences in the starting points of certain items, there were no real differences evident in the overall model regarding males and females. Thus, Hypothesis 3 is partially accepted.

Table 8

Scale Differences in Male and Female Responses

Items	Males	Females
LEB4 – *Accountability*	4.04	4.72
LEB8 – *Authority*	2.95	2.63
LEB15- *Development*	2.98	3.19

Discussion

The main purpose of this study was to evaluate the psychometric properties of a leadership empowerment behaviour questionnaire as proposed by Konzack et al. (2000). Previous research has shown that a reliable and valid questionnaire is necessary in the South African context. The process encompassed exploring construct validity, examining the reliability by the use of CFA-based reliability index (rho) and testing gender differences by means of measurement invariance. The expectation, as informed by Konzack, was that the six-factor model would fit the data. The six-factor model, however, was not supported by the data. Results obtained using a cross sectional design supported a three-factor model for the Leadership Empowerment Behaviour Questionnaire (LEBQ). The three factor model consists of autonomy, development and accountability.

In examining the factor structure, exploratory and confirmatory factor analyses were used where data was split into two. The confirmatory factor analysis revealed a three-factor model of the LEBQ to have better fit indices than the other three competing models that were tested. These results were different from past research where different factor structures were found. Stander (2007) found a two-factor structure in selected industries, Hunter (2010) found a one-factor structure in a petrochemical industry and Mare (2007) found a six-factor structure in the gold mining industry.

Autonomy was a combination of delegation of authority and self-directed decision making. This was supported by several researchers who argue that delegation of authority indicates that managers should share power with subordinates while encouraging autonomous action (Konzack et al., 2000; Leach et al., 2003; Vecchio & Boatwright, 2002). Information sharing, coaching and skills development loaded together to form *development*. When managers share information, it is a form of coaching and skills development. This was supported in literature by various researchers who advocate the importance of people development as a crucial role of a leader (Goleman, Boyatzis, & McKee, 2002; Knobel, 2006; May, Gilson, & Harter, 2004; Si & Wei, 2012; Stander & Rothmann, 2008). *Accountability* was the same as in the original questionnaire where all items loaded together. This was supported by Konzack et al. (2000) who indicated that when managers allow employees to give input, they create a sense of ownership. This model

gives a clear indication that when employees are developed and allowed the freedom to act autonomously, they display a greater willingness to stand accountable for results (Ford & Fottler, 1995; Hakimi, Van Knippenberg, & Giessner, 2010).

Based on the CFA-index reliability (rho), adequate reliability is above 0.70 (Gu et al., 2013; Wang & Wang, 2012). The LEBQ proved to be reliable in this study, also indicating adequate levels of reliability for the subscales, namely autonomy, development and accountability. Measurement invariance indicate that although there were differences in starting point of certain items, there were no real difference evident in the overall model regarding males and females.

Measurement invariance was used to determine differences between perceptions of males and females regarding leadership empowerment behaviour. There were no real differences evident between these groups. Three items were said to differ, but the overall model was the same. These items were on accountability, authority and development. Leadership roles in industry have predominately been occupied by males; thus a strong focus on fast tracking and developing females into more senior roles is required. There is still a great deal of disparity between males and females in certain industries. Men still feel vastly superior, while women feel that they have less authority due to the fact that work environments are still very male dominated. The results supported the above. The three items that differed suggest that men and women use different conceptual frames of reference when assessing their leaders' willingness to keep them accountable, allow employee decision making and create opportunities for development. Females' perception is that they are less empowered, according to the three items. This finding should be researched in more depth.

Based on the results of this study, the constructs autonomy, development and accountability prove valid in the South African context. Therefore, this makes a contribution to validity and reliability of the LEBQ in South Africa. There are several limitations in this study, especially the imbalance in the sample regarding men and women. Another limitation of the research is that the gender of the direct leader was not controlled for.

Based on this study, it is recommended that leadership empowerment behaviours (LEB) be developed within South African leaders, as there has been empirical evidence indicating positive

outcomes of LEB, such as increased levels of job satisfaction and better levels of employee work engagement. It is clear that a need exists for a strong focus on LEB. Managers should transform their roles into becoming coaches and leaders. Employees will be fulfilled only if they are given a fair level of autonomy in their work, while also standing accountable for any decisions made.

Future research could gain from a comprehensive approach, starting with a qualitative approach where people are asked what they regard as leadership empowerment behaviour in South Africa.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to draw conclusions from the literature presented and the empirical results, according to the general and specific objectives. Furthermore, attention is drawn to the limitations of the study and recommendations are made for further research and for the organisation.

3.1 CONCLUSIONS FROM LITERATURE AND EMPIRICAL RESULTS

The first objective was to conceptualise the construct leadership empowerment behaviour in literature.

Based on literature, there are three commonly used approaches to leadership empowerment behaviour. The first is by Arnold, Arad, Rhoades, and Drasgow (2000), the second by Pearce and Sims (2002), and the third by Konzack, Stelly, and Trusty (2000). Literature suggests that common factors are found in all these approaches. Focus is on the six dimensional approach described by Konzack et al. (2000). This approach focuses immensely on leaders who *delegate authority* to subordinates, giving them freedom to take initiative, whilst holding them *accountable* for their actions and decisions (Langfred & Moye, 2004; Leach, Wall, & Jackson, 2003); and leaders who value their subordinates' views by keeping them involved, encouraging *self-directed decision making* in order to achieve organisational goals (Ford & Fottler, 1995; Hakimi, Van Knippenberg, & Giessner, 2010; Leach, Wall, & Jackson, 2003). This approach also focuses strongly on *sharing information* with subordinates, which is crucial in empowerment in order to help them expand their knowledge, whilst developing their skills and coaching them for innovative performance (Hakimi et al., 2010; Si & Wei, 2012). This establishes trust in the relationship, whilst also creating room for self-improvement.

The second objective was to investigate the validity and reliability of the leadership empowerment behaviour questionnaire (LEBQ) in selected organisations in South Africa.

The CFA-based reliability index was used for the total scale and the separate sub-scales (Byrne, 2012; Gu, Little, & Kingston, 2013; Wang & Wang, 2012). Satisfactory reliability indices were attained. The EFA and the CFA were used to examine the factor structure. Four models were tested. Model 1 was a three-factor model consisting of autonomy, development and accountability. Model 2 was a one-factor model consisting of all the items. Model 3 was a two-factor model consisting of development and decision-making, and Model 4 was a three-factor model of which its latent variables were not allowed to correlate. Of all these models, Model 1 indicated good fit.

In this study a three-factor structure was confirmed. The three-factor model comprises autonomy, development and accountability. This model indicates that subordinates should be given authority and be encouraged to act on their own in the decision-making process in order to achieve autonomy (Konzack et al., 2000; Van Dierendonck & Dijkstra, 2012). Leaders should become people developers, by investing time in coaching and upskilling their subordinates in order to ensure that the development process takes place. Lastly subordinates need to be held accountable for the decisions they make in order to ensure the work is done according to high standards (Hall, Royle, Brymer, Perrewe, Ferris, & Hochwarter, 2006; Pearce & Sims, 2002). From validity perspective, invariance testing indicated limited differences between male and female perceptions of leadership empowerment behaviour.

The third objective was to evaluate if there were differences among different gender groups in terms of their perception of leadership empowerment behaviour.

Based on literature there is on-going debate about whether men and women are different in terms of their leadership styles and furthermore their perceptions of leadership empowerment (Antonakis, Avolio, & Sivasubramaniam, 2003; Eagly, Johannesen-Schmidt, & Van Engen, 2003). Women are said to be democratic, participatory, nurturing and caring, while men lead from the front and are more dominant in terms of their leadership (Dickson, Smith, Grojean, & Ehrhart, 2001; Konrad, Ritchie, Lieb, & Corrigall, 2000; Scott & Brown, 2006). Differences between men and women in terms of their perception of leadership empowerment behaviour were explored in this study, further validating the study. In terms of invariance testing, the configural model concluded that the three-factor structure obtained for the total sample also

holds for the two groups of respondents separately. The metric model indicates that the latent variables are measured in the same way with the same metric in the two target groups. The Scalar model indicates that on these three items, males and females differ regarding their starting points in their response to these questions. Although there were differences in the starting points of certain items, there were no real differences evident in the overall model regarding males and females.

3.2 LIMITATIONS

There are limitations that were noted in this study. The research design was cross-sectional. This allowed for a measurement at a specific moment in time which does not provide for a longitudinal perspective where possible changes and dynamics could be assessed over a longer period of time. According to Salkind (2009), a cross-sectional design does not allow for individual continuity and assessment of the changing impact of the variables on the participants over time.

The biographical dynamics present another limitation in the context of the study. There were imbalances in the sample in terms of males and females. There were a greater number of males as opposed to females; a more representative sample of female respondents would have proven valuable in this study. This limitation supports the need for more research of women in leadership positions. Although a large sample, it is only limited to three types of industries.

3.3 RECOMMENDATIONS

Recommendations based on the study will now be made to the organisation and academics for further research.

3.3.1 Recommendations for the Organisation

Based on past research, leadership empowerment has proved to be crucial and it makes a difference within organisations. Results in this study indicate that leadership empowerment behaviour should be the core focus within organisations. According to Seibert, Wang and

Courtright (2011), feelings of empowerment are likely to be shaped by the organisational context, and in particular by management practice that delegate decision-making authority. Attention should be placed on the development and strengthening of leadership empowerment behaviours to ensure that goals are met (Amundsen & Martinsen, 2014; Huang & Hsieh, 2015). It is recommended that all employees in positions of seniority be coached and trained on how their leader behaviours influence the workforce negatively or positively. This could improve self-awareness and improve motivation. It is therefore advisable that different functions within the business apply leadership empowerment behaviour practically. The following could act as a guide:

- **Delegation of Authority**: leaders within businesses can be truly "empowering" by completely delegating formal authority to subordinates, amongst other things allowing them to make autonomous decisions. Successful delegation will give subordinates a greater feeling of self-determination and perceived impact than merely participation. By delegating authority, leaders develop people.
- **Skills development**: leaders should make continuous learning and skills development a priority within the business. Leaders should model empowering behaviours in order to create an encouraging environment. Leaders should furthermore relinquish some authority and play new roles as coaches who guide employee behaviours at work.
- **Accountability**: Employees need to be allowed some level of accountability; this could be done through giving them a sense of responsibility and holding them answerable for all outcomes, whether good or bad. This creates a feeling of ownership and allows for thinking "outside the box".

3.3.2 Recommendations for Future Research

It could be recommended that future studies in this research area follow a longitudinal design. This will allow for a more accurate representation of the dynamics over a longer period of time (Salkind, 2009). Future research could also gain from a qualitative

approach. The entire concept could be relooked by the use of focus groups in order to ensure richness of information. It would be interesting to research if a qualitative approach towards conceptualising the construct will lead to the same outcome as this research. The value of this study could be enhanced by an in-depth study of differing gender perceptions. South Africa has a strong drive for more female managers; with this increasing importance, there is a research gap in terms of limited research on women's perceptions of leadership and differences between gender perceptions.

It would be beneficial to investigate the link between leadership empowerment behaviour with other factors such as performance, thriving, trust, psychological safety and work engagement. All these factors prove to be important in the workplace, especially the investigation of whether trust mediates the relationship between leadership empowerment behaviour and other outcomes, such as work engagement, performance and others.

It is further recommended that an investigation be done into the differences in perception of leadership empowerment behaviour among people of different age groups as well as different industries. It would also be valuable to establish a link between positive psychology and leadership empowerment behaviour principles. Organisations have a need that these two approaches be integrated. Positive psychology focuses on finding ways in which healthy organisations and their employees can develop and flourish, by focusing on employees' key strengths, meaning in their work and the purpose thereof. The results of this study indicate that a need is arising in organisations for leaders with a strong focus on giving recognition, providing coaching and human capital development.

3.4 CHAPTER SUMMARY

In this chapter, the conclusions regarding the theoretical and empirical objectives were drawn. The limitations of the research were discussed and recommendations were made for current organisations as well as for future research.

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