

IMPACT OF TRANSFORMATIONAL LEADERSHIP MEDIATED BY SELF-EFFICACY ON EMPLOYEE INNOVATION IN THE SOUTH AFRICAN LOCAL GOVERNMENT SECTOR

By

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A dissertation submitted in partial fulfilment of the requirements for the degree

of

Master of Commerce in Human Resource Management

School of Management, IT & Governance
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July 2017

ABSTRACT

The study investigated the impact of transformational leadership as a 'predictor variable' on employee innovation 'predicted variable'. The relationship is mediated by self-efficacy. Studying these variables in isolation is helpful but the challenge is posed by limited resources especially when employee innovation has been identified as an imperative to organizational strategy and a desired positive organizational behaviour. Municipalities will know which predictor variable to primarily focus on in order to enhance innovation.

In the previous study conducted by the researcher involving leader member exchange (LMX), self-efficacy and employee innovation, the statistical results from the regressions revealed an R square of .20. This showed that LMX and self-efficacy only had a 20% effect on employee innovation. It indicated that 80% of employee innovation is explained by other constructs hence the inclusion of transformational leadership as one of the predictor variables (Msweli, 2015). The study further recommended examining different predictor variables for future research.

A random sample of 141 employees from Mandeni Municipality and the City of Umhlathuze was used in this study. A cross-sectional design was adopted. The analysis included the correlation and regression analysis which examined in isolation the relationships of transformational leadership with self-efficacy, self-efficacy with employee innovation, transformational leadership with employee innovation and finally all three constructs combined. Regressions were also used to examine the main relationship model of transformational leadership, employee innovation with self-efficacy as a mediator.

The research findings provide leaders in the South African local government sector with an understanding of the relationship of the constructs. They will also contribute to the body of knowledge by furnishing a better insight with regards to the impact of transformational leadership on employee innovation. Primarily, it provides a prototype that clarifies the relationship of transformational leadership, work self-efficacy with employee innovation in the South African local government context.

DECLARATION

I, Qinisani Ndabezinhle Mpumelelo Msweli declare that;

- i. The research reported in this dissertation, except where otherwise indicated, is my original research.
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- iii. This dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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ACKNOWLEDGEMENTS

This study would not have been a success without the generosity and assistance that I was afforded. Therefore I would like to thank and appreciate the individuals and organizations who supported me through this exciting expedition.

Firstly, the gratitude belongs to the almighty for the gift of life and affording me an opportunity to pursue these studies.

To my employer (UVS) for creating an enabling environment for me to focus on the studies and availing resources to support every step of the way.

To the management at the City of Umhlathuze and Mandeni Municipality for allowing me to conduct a study in their workplaces and the staff who took their time to participate in the survey. With exception, I'd like to thank Gugu Mthembu from the City of Umhlathuze who ensured that I receive the necessary support.

My family for providing encouragement and support throughout the journey, Dr Gill Hendry for her statistical assistance and finally Dr Abdulla Kader for his supervision.

Thanks a lot and God bless!

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DEFINITIONS

Term	Description
ANOVA	Statistical technique that assesses whether there are any statistically
	significant differences between the means of three or more independent
	groups
Antecedent	A preceding event
Beta coefficient	Estimates resulting from a regression analysis that have been
	standardized so that the variances of dependent and independent
	variables are 1
Binomial test	Exact test for the statistical significance which measures the deviations
	from the expected distribution of observations when they are in the
	form of two categories
Causative / causal	A way of describing how a cause and effect interact
relationship	
Correlation matrix	Analysis used to quantify the association between two continuous
	variables
Cronbach Alpha	Measure of the internal consistency of a measurement or test
Descriptive statistics	Brief descriptive coefficients that summarize a given data set, which
	can be either a representation of the entire population or a sample of it
Dyad	Something that consists of two elements or parts
Empirical investigation	Investigation used to answer empirical questions which are clearly
	defined and arise from empirical data collected evidence (data)
Empirical study / research	Research using empirical evidence that is analyzed quantitatively or
	qualitatively
Hypothesis	A supposition or proposed explanation made on the basis of limited
	evidence as a starting point for further investigation
Inferential statistics	Statistics used from sampled data to find out what the population thinks
Likert scale	Psychological measurement device that is used to gauge attitudes,
	values and opinions. It functions by having a person complete a
	questionnaire
Measurements	Questionnaires used to collect data for the study
One-sample test	Statistical procedure used to determine whether a sample of
	observations could have been generated by a process with a specific
	mean
	Dogoly

Term	Description
Regression analysis	analysis for estimating the strength of the relationship among variables
Researcher	Student conducting the research
Research problem	Definite or clear expression about an area of concern, a condition to be improved upon, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or within existing practice that points to a need for meaningful understanding and deliberate investigation
Research site(s)	Workplaces where the data was collected
Study	Research work conducted by the student
T-tests	Analysis of two population means through the use of statistical examination

ABBREVIATIONS AND ACRONYMS

Abbreviation	Description
CSE	Creative Self-Efficacy
EI	Employee Innovation
EPPO	Expected Positive Performance Outcome
ERP	Enterprise Resource Planning
IWB	Innovative Work Behaviour
LMX	Leader-Member Exchange
MDM-IInB	Multi-Dimensional Measure of Innovative Behaviour
SD	Standard Deviation
SE	Self-Efficacy
SEM	Structural Equation Modelling
Sig	Level of Significance
TL	Transformational Leadership
TLI	Transformational Leadership Inventory
TMT	Top Management teams
POS	Perceived Organizational Support
R&D	Research and Development
WSES	Work Self-Efficacy Scale

CHAPTER 1 - ORIENTATION

1.1. Introduction

Anderson, Potočnik and Zhou (2014, p.3) states that "innovation and creativeness in the working environment have become key determinants of company's performance, long-term survival and business success." This is supported by Seybold (2014, p.3) who stated that "the capability to innovate keeps an organization on top of rivalry. The quicker and better the company innovates, the more probable it is for it to continue as a leader and trend setter."

It is therefore a business imperative to encourage innovation in order to remain relevant. Management should be able to create a conducive environment for innovation through their leadership style.

1.2. Theoretical background of the study

The significance of innovation will further persist into the future as the level of competitiveness intensifies and uncertainty of the business world increase (Han, Oh, Im, & Chang, 2012). With these conditions, companies are compelled to detect and employ leaders who can positively influence innovation in the working environment (Stempihar, 2013). This becomes essential for companies based in the emerging economies facing volatile business conditions, unstable institutions and extreme microeconomic unpredictability (Farashahi & Hafsi, 2009). According to Tipu and Fantazy (2012), during such times, leadership is faced with a difficult responsibility of embedding a strong culture that emboldens innovation which is the foundation of this research study to investigate the impact of transformational leadership (TL) on employee innovation (EI) with work self-efficacy as the mediator.

Wright and Pandey (2010) mentioned that transformational leaders have an ability to profoundly change expectations and attitudes of their subordinates, as a result please the high level needs (Srithongrung, 2011). While transactional leaders encourage their subordinates through trading rewards in lieu of performance, which purely satisfies the needs at the lower level. Moreover, with transformational leadership satisfying the high order needs, it has regularly been observed as being far superior in creating wanted results compared to transactional leadership (Bass & Riggio, 2006). With the transformational leaders being exemplary and modelling behaviour in line with self-efficacy, empirical investigation has established that their subordinates do display comparable qualities (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). For example, Salanova, Lorente, Chambel, and Martinez (2011) established that transformational leadership positively influences the nurses' self-efficacy. Along the

same lines, Liu, Siu, and Shi (2010) established that transformational leadership improved employees' self-efficacy in public and private sectors.

Redmond, Mumford and Teach (1993) claimed that the individual's innovative efforts in the working environment has significant influences on the performance of the organization. Additionally, they postulated that the leadership that outlines group goals whilst controlling important resources can create circumstances and conditions that stimulate their subordinates to be involved in creative endeavours to achieve their goals. According to (Amabile, Conti, Coon, Lazenby, and Herron, 1996; Mumford and Gustafson, 1988) the research established that leadership does have the ability to make a favourable climate for the employees to be innovative and creative.

1.3. Research problem

Studying variables separately is useful. The challenge is posed by resources that are limited especially when innovation has been acknowledged as an imperative to organizational strategy and a desired positive organizational behaviour. Municipalities will have an ability to understand the predictor variable to put emphasis on.

1.4. Hypothesis

The following hypothesis was developed for the study.

1.4.1. Primary hypothesis

- Alternative hypothesis there is a significant relationship of transformational leadership, selfefficacy with employee innovation.
- Null hypothesis there is no significant relationship of transformational leadership, self-efficacy with employee innovation.

1.4.2. First sub-hypothesis

- Alternative hypothesis there is a significant relationship of transformational leadership with selfefficacy.
- Null hypothesis there is no significant relationship of transformational leadership with selfefficacy.

1.4.3. Second sub-hypothesis

- Alternative hypothesis there is a significant relationship of self-efficacy with employee innovation.
- Null hypothesis there is no significant relationship of self-efficacy with employee innovation.

1.4.4. Third sub-hypothesis

- Alternative hypothesis there is a significant relationship of transformational leadership with employee innovation.
- Null hypothesis there is no significant relationship of transformational leadership with employee innovation.

1.5. Research objectives

Emanating from the preceding research hypothesis, the following research objectives and goals have been set forth.

1.5.1. Main objective

To empirically examine the causative relationship of transformational leadership, self-efficacy with employee innovation in the South African local government sector.

1.5.2. First sub-objective

To empirically examine the causative relationship of transformational leadership with self-efficacy.

1.5.3. Second sub-objective

To empirically examine the causative relationship of self-efficacy with employee innovation.

1.5.4. Third sub-objective

To empirically examine the causative relationship of transformational leadership with employee innovation.

1.6. Preview of the literature review

1.6.1. Definition of variables

1.6.1.1. Transformational leadership

Transformational leadership put emphasis on the "exchange process based on the accomplishment of contractual obligations in which the leader normally sets objectives and monitors and controls results. (Casida & Parker, 2011, p.479)".

1.6.1.2. Self-efficacy

Self-efficacy refers to "an individual's confidence that an employee possesses to successfully and effectively perform a particular task (Elias, Barney & Bishop, 2013, p.812; Walumbwa, Cropanzano, & Goldman, 2011, p.154)".

1.6.1.3. Employee innovation

Employee innovation refers to "the behaviour directed towards the initiation and application of new and useful ideas, processes, products or procedures within a work role, group or organization (de Jong & den Hartog, 2007, p.43)".

1.6.2. The antecedents of employee innovation

The viewpoint of different scholars state that employee innovation can be regarded as a consequence of strategy, organizational culture and climate, style of leadership, sound human resource practices and people in the organization (Rkdahl & Rjesson, 2011; Birken, Lee, Weiner, Chin, Chiu, & Schaefer, 2015; Ryan & Tipu, 2013; Díaz-García, González-Moreno & Sáez-Martínez, 2013; Büschgens, Bausch, & Balkin, 2013; Changa, Gong, & Shum, 2011).

1.6.2.1. Strategy

Birken, et al. (2015) investigated how the support of upper management affect the commitment of middle management. The study used 136 participants from 120 US health centers. The findings revealed that upper management increase middle management's commitment through directly communicating with middle management that implementing innovation is a strategic

imperative. In addition, there has to be an allocation of implementation policies and practices including human resources, training, performance reviews, budget and encouraging middle management to leverage human resources and performance reviews in order to succeed in the implementation of innovation.

1.6.2.2. Organizational culture

Büschgens, et al. (2013) conducted a meta-analytic review of innovation and organizational culture. It comprised of 43 studies and the pooled sample size was 6341 companies. The results of the pooled data confirmed the hypothesis that management in innovative companies most likely implement a culture of development in their firms, which emphasizes a flexibility and external positioning. They further asserted that management following a strategy of radical innovation should create a culture of development in their companies.

1.6.2.3. Organizational climate

Rkdahl and Rjesson (2011) investigated the preconditions for innovation at organizational level with regards to the companies' organizational capabilities and climate for innovation, and how they could better their processes of innovation. It used 9 large Nordic (Norwegian and Swedish) manufacturing companies based in the forestry sector. The findings revealed that forestry-based organizations have creativity and possess the innovation potential. Nonetheless, the innovation capabilities, which are the capabilities to do unique things and to be adventurous with ideas, fluctuate among organizations. The study made emphasis of management awareness and willingness, and the implementation of a strategy for innovation as the two obvious capabilites that are important in innovation. The creation of an appropriate managerial action or climate will increase the innovation output.

1.6.2.4. Style of leadership

Ryan and Tipu (2013) examined the dimensions of leadership of a full range leadership model and the relationship between leadership and propensity to innovate. The study used 548 participants in Pakistan. The findings revealed that leadership that is active strongly and positively influence the propensity to innovate, while the leadership that is passive and full of avoidance has a significant but weakly positive effect on the propensity to innovate.

1.6.2.5. Human resource practices

Changa, et al. (2011) investigated how companies in the hospitality sector can encourage radical and incremental innovation through human resource management practices such as selection and training. It used 196 participants from independent hotels and restaurants in China. The results revealed that the employment of multi-skilled essential customer contact employees and training, multi-skilling them both have significant and positive effects on radical and incremental innovation.

1.6.2.6. People

Díaz-García, et al. (2013) examined how diversity of gender in the Research and Development teams, among other factors, impacts innovation using Spanish participants. The results indicated that the diversity of gender has a positive correlation to radical innovation. Nevertheless, it doesn't endorse *incremental* innovation in a similar manner. The constructive relationship happens under specific circumstances of the job as the two innovation types (radical and incremental) may necessitate different skills set to be performed effectively.

1.6.3. The relationship of TL, self-efficacy with employee innovation

1.6.3.1. Transformational leadership with self-efficacy

Chou, Lai and Liu (2015) explored the link between transformational leadership and subordinates' intention to adopt new technology with self-efficacy as the mediator. It used 346 participants form 7 Taiwanese companies. The results revealed that transformational leadership positively exerts its influences on subordinates' intention to adopt new technology. In addition, the result also supports that self-efficacy is a full mediator of the relationship between transformational leadership and subordinates' intention to adopt new technology.

1.6.3.2. Self-efficacy with employee innovation

Hu and Zhao (2016) examined how creative self-efficacy plays a mediating role in the relationship between employee innovation and knowledge sharing with job satisfaction as a moderator. It used 274 participants from China. The results revealed that creative self-efficacy and knowledge sharing had a positive correlation with employee innovation and that creative self-efficacy mediates the effects of innovation and knowledge sharing.

1.6.3.4. Transformational leadership with employee innovation

Weng, Huang, and Wang (2012) examined the effect of transformational leadership on the innovative behaviour of nurses with the mediating effect of organizational climate. The study used 439 nurses from hospitals in Taiwan. The results revealed that organizational climate has an important effect on innovation behaviour. They also revealed that transformational leadership has unintended consequences on innovative behaviour with the mediating effect of innovation and safety climates for patients.

1.6.3.5. TL, self-efficacy with employee innovation

Jaiswal and Dhar (2015) examined the role transformational leadership has in the prediction of employee creativeness. It also investigated the roles of innovation climate as a mediator and creative self-efficacy as a moderator. It used 372 employees together with their direct superiors in the Indian hospitality industry. The results revealed that transformational leaders can encourage an innovation climate that encourages creativity of employees. Furthermore, an important moderating effect of creative self-efficacy was established in the relationship between employee creativity and innovation climate. The results revealed that employees with higher degrees of creative-self-efficacy make use of creative behaviour when afforded a supportive innovation climate.

1.6.3.6. Literature gap

Although the variables have been extensively studied in prior research, they have not been examined in a South African context. Most of the available literature is from the European, North Africa and Asian countries. It is therefore important to understand the relationship of the variables within the South African context due to different cultures and beliefs across the globe. A leadership style can be construed differently by respondents from developed versus developing countries.

1.7. Conceptual framework



Figure 1. Conceptual framework for the study

The study will investigate the impact of transformational leadership as a 'predictor variable' on employee innovation 'predicted variable'. The relationship will be mediated by self-efficacy.

1.8. Importance of the study

The planned study will offer leadership for the South African local government with some comprehension of the relationship of transformational leadership, self-efficacy with employee innovation. In theory, the results will add to the body of knowledge by furnishing a better explanation of how the transformational leadership style enhance employee innovation. Moreover, the planned study will add value to scholarly research by coming up with a prototype that clarifies the relationship of transformational leadership, self-efficacy with employee innovation in the South African local government context.

1.9. Rationale of the study

The study should be conducted in order to establish if there is a significant influence of transformational leadership on employee innovation with self-efficacy as the mediator. If the study is not conducted, local government leaders may never be aware of the most efficient leadership style to adopt in order to improve creativity or innovativeness in the workplace.

1.10. Research methodology

1.10.1. Research design

The study will be a "cross-sectional research design containing different age groups which will be studied in terms of one or more variables simultaneously" (Welman, Kruger, & Mitchell, 2005).

1.10.2. Research approach

This study will be centred on "the positivist approach which studies the observable human behaviour and underlies the natural-scientific method in human behavioural research". It will be a quantitative study which will "evaluate objective data consisting of numbers and deal with the abstraction of reality whilst being descriptive in nature meaning that it will be trying to understand the way things are" (Welman, et al., 2005).

1.10.3. Research sites

The Mandeni Municipality located in Mandeni and the City of Umhlathuze in Richards Bay are the chosen research sites for the study. Both research sites are based in KwaZulu-Natal. They were chosen because of staff compliments over 1000 and combined will be able to provide a sample required by the study. In addition to that, some element of goodwill from within the two research sites was relied upon as it is generally difficult to access organizations for research purposes. The research sites were also within reach of the researcher.

1.11. Target population

The target population was 3340 comprising of the employees from the Mandeni Municipality and the City of Umhlathuze.

1.12. Sampling strategies

A simple random sample was used by the researcher.

1.13. Sample size

A final sample of 141 was used for the study.

1.14. Sample

A sample frame of 164 questionnaires was gathered thereafter a simple random sample used by the researcher to get the final sample of 141.

1.15. Data collection

Data was collected manually using a survey strategy at Mandeni Municipality and the City of Umhlathuze. The following instruments will be used for data collection:

1.15.1. Transformational leadership

The transformational leadership behaviour inventory (TLI) will be used as a measurement for Transformational leadership. It was developed by Podsakoff, MacKenzie, Moorman and Fetter (1990). According to them, "the instrument was designed to measure six key dimensions of transformational leadership namely; articulating a vision, providing an appropriate model, fostering the acceptance of group goals, high performance expectations, providing individualized support, and intellectual stimulation."

1.15.2. Self-efficacy

A work self-efficacy scale will be used to measure self-efficacy that was developed by Avallone, Pepe, and Porcelli (2007). According to Pepe, Farnese, Avalone, and Vecchione (2010, p.204), "it is based on two factors, which are relational willingness and commitment. It measures observations regarding specific work spheres such as the capability to manage interpersonal relations (colleagues and direct superiors), to work with colleagues with different traits and experiences, to efficaciously behave in the work setting, to learn new working approaches, to respect schedules and work time limits and to achieve assigned objectives."

1.15.3. Employee innovation

A multi-dimensional measure of individual innovative behaviour will be used as a measurement for employee innovation. It was developed by Kleysen and Street (2001). According to them, "it is based on five dimensions namely; opportunity exploration, generativity, formative investigation, championing and application. It measures each factor with items related to the five dimensions."

1.16. Data quality control (reliability and validity)

Cronbach's coefficient alpha will be used to calculate reliability to evaluate the efficiency of the measures to the constructs. According to Welman, et al. (2005), this is "a measure of the internal consistency of a measurement / test. The index shows the degree to which all the items in a measurement / test measure the same attribute". The tolerable score in business research is .70. Each instrument will also be validated by the number of times it has been used in previous studies.

1.17. Measurements

1.17.1. Transformational leadership

According to Podsakoff, et al. (1990), "the measuring instrument contains twenty two-items measured on a five-point Likert scale. Items are preceded by "My leader" The first item reads ("....Has provided me with new ways of looking at things which used to be a puzzle for me.")." The highest score is 110 and the low score is 22. A high or low score will signify the magnitude of transformational leadership for the respondent's leader.

1.17.2. Self-efficacy

According to Pepe, et al. (2010), "the measuring instrument comprises of ten-items measured on a five-point Likert scale. The first item talks about a tendency towards or attention to relationships with colleagues and superiors (e.g. "....achieve goals that will be assigned")." The highest score is 50 and the lowest score is 10. A high score represents employee's belief in the ability to carry out the given duties and a low score symbolizes scepticism in the ability to carry out the given duties.

1.17.3. Employee innovation

According to Kleysen and Street (2001), "the measuring instrument comprises of fourteen items measured on a six-point Likert scale. Items begin with "In your current job, how often do you? The first item reads ("....look for opportunities to improve an existing process, technology, product, service or work relationship?")." The highest score is 84 and the lowest score is 14. A high or low total represents the extent of innovativeness among the survey participants.

1.18. Data analysis

Data analysis was done using the SPSS statistical package. The descriptive data will be produced initially so that the sample demographics will be understood. This will be presented with averages for continuous variables (e.g. race and gender etc.). Inferential statistics will also be generated using the test for homogeneity (ANOVA) and regression analysis.

1.19. Ethical considerations

During the administration of the survey, the researcher will attach the Participant Information Sheet (Appendix E) on each questionnaire to ensure that the participant if fully aware of the research objectives. Confidentiality of the completed surveys will be maintained as the researcher will collect and keep them.

1.20. Summary

This chapter outlined the contents of this research report. It presented the theoretical background of the study first then the research problem, hypothesis and the objectives. Thereafter, a mini-literature review was conducted in order to lay a foundation of what would be covered in the Chapter 2. It also gave a preview of what the methodology of the study contains. Other important elements like study limitations and ethical considerations were also unpacked. The oncoming chapters are as follows:

<u>Chapter 2</u>: The chapter will present the theoretical basis of the study commencing with the definition of constructs and then describing the antecedents of employee innovation. Relationships between the transformational leadership, self-efficacy and employee innovation will then be investigated in isolation using previous literature from various authors. A summary of the literature review will be done to conclude the chapter.

<u>Chapter 3</u>: The chapter will outline the research methodology used when conducting this research study. It comprises of a purpose of the investigation, a description detailing the composition of the sample and the measurement instruments that have been used in the study. The research design, collection of data and data analysis are also described in the chapter.

<u>Chapter 4</u>: The chapter will present the results from the collected data. It comprise of the sample demographics, descriptive statistical analysis of the constructs, correlations, inferential statistical analysis and the relationship of transformational leadership with employee innovation mediated by self-efficacy.

<u>Chapter 5</u>: The final chapter conducts discussions centred on the research objectives that were set out in this chapter. The discussions will communicate the finding of the study which will be informed by chapters 2 (literature review) and 4 (statistical results). The discussion will also confirm the hypothesis that has been described earlier in this chapter. The recommendations will be made based on the findings and limitations delineated in order to be considered for future research of similar nature.

The oncoming chapter covers the previous literature that studied the variables for this study. It is divided into three sub-sections namely; definition of concepts, antecedents of the predicted variable and finally reviews studies that examined the relationship of the three variables.

CHAPTER 2 - LITERATURE REVIEW

2.1. Introduction

The chapter conducts an evaluation of previous studies to establish what the relationship of transformational leadership, self-efficacy and employee innovation entails. It will start by defining the three constructs which will be followed by the precursors or antecedents of employee innovation. Thereafter, prior empirical studies that examined the relationship of the three constructs will be analyzed in order to establish the findings with regards to the relationship of the constructs. A summary of the key findings from the literature review will be done and any gaps in the literature identified and communicated in the last chapter. In conclusion, a conceptual framework for the variables involved in this study will be developed based on the literature findings. For this research, innovation and creativity will be used interchangeably.

2.2. Concept definition

2.2.1. Transformational leadership

Transformational leadership is the "process whereby leaders engage and influence their followers towards attaining a shared vision through their capacity to inspire, innovate and personalize their attention (MacKie, 2014, p.118)". Similarly, transformational leadership put emphasis on the "development and intellectual inspiration of subordinates, and motivates subordinates to pursue greater collective goals, visions and missions that transcend personal interests and clearly convey attractive visions (Casida & Parker, 2011, 479)".

Along the same lines Warrick (2011, p.12) described transformational leadership as "a process by which leaders bring about significant positive changes in individuals, groups, teams, and organizations by using inspiration, vision, and the ability to motivate followers to transcend their self-interests for a collective purpose".

2.2.2. Self-efficacy

According to Elias, et al. (2013, p.812), work self-efficacy, is defined as "an employee's belief that he or she has what it takes to perform his or her job both successfully and effectively". On the same note, Walumbwa, et al. (2011, p.154) defined self-efficacy as an "individual's belief in his or her ability to

successfully perform tasks". Stated differently, self-efficacy can be defined as an "individual's belief in one's capability to organize and execute the courses of action required to produce given attainments (Liao, Liu, & Loi 2010, p.1091)".

2.2.3. Employee innovation or creativity

Yuan and Woodman (2010, p.323) described employee innovation as "conducting tasks beyond team, group, or organization routine, including a willingness to take risks". Along the same lines de Jong and den Hartog (2007, p.43) defined employee innovation as "the behaviour directed towards the initiation and application of new and useful ideas, processes, products or procedures within a work role, group or organization". On a slight change of terminology, employee creativity refers to "an individuals' generation of novel and useful products, ideas and procedures that are the raw materials for innovation" (Jeevan & Manisha, 2015, p.81).

2.3. The antecedents of employee innovation

The viewpoint of different researchers state that employee innovation can be regarded as a consequence of strategy, organizational culture and climate, style of leadership, sound human resource practices and people in the organization (Zhand & Begley, 2011; Rkdahl & Rjesson, 2011; Birken, et al., 2015; Ryan & Tipu, 2013; Díaz-García, et al., 2013; Büschgens, et al., 2013; Changa, Gong, & Shum, 2011; Slåtten, 2011; Engelen, Flatten, Thalmann, & Brettelon, 2014; Kaliappen & Hilman, 2014; Prieto & Perez-Santana, 2014; Mokhber, Ismail, & Vakilbashi, 2015).

2.3.1. Strategy

A contribution by Kaliappen and Hilman (2014) studied the influence of service innovation on the relationship of organizational performance and differentiation strategy. The findings revealed that the differentiation strategy does have a positive influence on organizational performance with a partial mediation of service innovation.

Birken, et al. (2015) conducted a study that investigated how the support of upper management affect the commitment of middle management. The study used 136 participants from 120 US health centers. The findings revealed that upper management increase middle management's commitment through directly communicating with middle management that implementing innovation is a strategic imperative. In addition, there has to be an allocation of implementation policies and practices including human resources, training, performance reviews, budget and encouraging middle management to

leverage human resources and performance reviews in order to succeed in the implementation of innovation.

2.3.2. Organizational culture

Büschgens, et al. (2013) conducted a meta-analytic review of innovation and organizational culture. It comprised of 43 studies and the pooled sample size was 6341 companies. The results of the pooled data confirmed the hypothesis that management in innovative companies most likely implement a culture of development in their firms, which emphasizes a flexibility and external positioning. They further asserted that management following a strategy of radical innovation should create a culture of development in their companies.

Subsequently, Engelen, et al. (2014) studied the relationship of organizational culture and innovation where they analyzed the influence of organizational culture on the organization's entrepreneurial orientation and how the relationship is impacted on by national culture. The study used 643 respondents from Germany and Thailand. The findings revealed that a flexible organizational culture is mostly effective in order to achieve entrepreneurial alignment, particularly in countries with cultures that are individualistic with and low power distance, whereas a multi-layered organizational culture is usually an obstacle to entrepreneurial alignment.

2.3.3. Organizational climate

Zhand and Begley (2011) studied the relationship of organizational climate and creativity with two groups of R&D professionals from China. The findings revealed a positive relationship between organizational climate and innovation.

Rkdahl and Rjesson (2011) investigated the preconditions for innovation at organizational level with regards to the companies' organizational capabilities and climate for innovation, and how they could better their processes of innovation. It used 9 large Nordic (Norwegian and Swedish) manufacturing companies based in the forestry sector. The findings revealed that forestry-based organizations have creativity and possess the innovation potential. Nonetheless, the innovation capabilities, which are the capabilities to do unique things and to be adventurous with ideas, fluctuate among organizations. The study made emphasis of management awareness and willingness, and the implementation of a strategy for innovation as the two obvious capabilites that are important in innovation. The creation of an appropriate managerial action or climate will increase the innovation output.

2.3.4. Style of leadership

Ryan and Tipu (2013) studied the dimensions of leadership of a full-range model of leadership and the relationship between leadership and propensity to innovate. The study used 548 participants in Pakistan. The findings revealed that leadership that is active strongly and positively influence the propensity to innovate, while the leadership that is passive and full of avoidance has statistical significance with a positive but weak effect on the inclination to innovate.

Mokhber, et al. (2015) studied the influence of transformational leadership on innovation within an organization. The study used 219 respondents from Iran. The findings revealed a strongly positive relationship of transformational leadership with innovation within an organization.

2.3.5. Human resource practices

Changa, et al. (2011) investigated how companies in the hospitality sector can encourage radical and incremental innovation through human resource management practices such as selection and training. It used 196 participants from independent hotels and restaurants in China. The results revealed that the employment of multi-skilled essential customer contact employees and training, multi-skilling them both have significant and positive effects on radical and incremental innovation.

Prieto and Perez-Santana (2014) studied the role of high-involvement Human Resource practices in the employee's innovative behaviour. The study used 198 participants from Spain. The findings revealed that HR practices that enhance the ability and opportunity are positively correlated to innovative work behaviour. However, co-worker support and management mediates the the relationship.

2.3.6. People

Slatten (2011) investigated the link of innovation and people using some of the effects of positive emotions and precursors from the perspective of employees. The study used 279 respondents from Norway and the results revealed that both work role benefit and employee perception of management are positively linked to the employees' innovative behavior and feelings of joy. The results established that the employee's feelings of joy had a direct effect on their innovative behavior.

Díaz-García, et al. (2013) examined how diversity of gender in the Research & Development teams, among other factors, impacts innovation using Spanish participants. The results indicated that the diversity of gender has a positive correlation to radical innovation. Nevertheless, it doesn't endorse

incremental innovation in a similar manner. The constructive relationship happens under specific circumstances of the job as the two innovation types (radical and incremental) may necessitate different skills set to be performed effectively.

2.4. Literature review of the relationship of TL, SE and EI

When unpacking Transformational leadership in the book titled 'Leadership in Organizations', Yukl (2013) expresses that the core of transformational leadership seems to be inspiring, developing and empowering subordinates. A transformational leader possibly does a lot to empower subordinates in making them independent from the leader. This would include, delegation of substantial authority for teams or individuals, developing the skills of subordinates and the belief in themselves, making privileged information directly accessible to them, removing unnecessary red tape and creating a strong culture that backs empowerment (Yukl, 2013).

The literature review below will verify if the aforementioned attributes for a Transformational leader does have a positive influence on employee innovation. Prior studies will be evaluated using the three constructs for the study in isolation. Lastly, prior studies comprising of all three constructs will be evaluated.

2.4.1. Transformational leadership with self-efficacy

Liu, Siu and Shi (2010) studied the link of transformational leadership with employee well-being with self-efficacy and trust in the leader as mediators. The study used 745 respondents from China. The findings revealed that self-efficacy and employee's trust in the leader moderately mediated the effect transformational leadership has on job satisfaction, and was a full mediator of the transformational leadership's influence on perceived work stress and symptoms. The "trust in the leader" is also supported by Yukl (2013) who mentioned that a transformational leader's actions should show confidence and optimism. Subordinates will not buy into a vision without the leader showing belief and self-confidence.

Walumbwa and Hartnell (2011) studied how the opinion of employees on interpersonal identification with their superior and self-efficacy as a mediator in the relationship of transformational leadership with supervisor-rated performance. The study used 501 respondents from the South-Western United States of America. According to the findings, interpersonal identification with the superior mediates the relationship of transformational leadership with self-efficacy, which then had a positive relationship with employee performance.

Salanova, Lorente, Chambel and Martinez (2011) examined the relationship between superiors' extrarole performance of staff nurses and transformational leadership with the mediation of work engagement and nurse self-efficacy. The study used 280 respondents from Portugal. Results showed a model of full mediation whereby transformational leadership accounted for extra-role performance through work engagement and self-efficacy. The findings also revealed that transformational leadership has a direct link with work engagement.

Waqas Raja (2012) examined how transformational leadership leads to high employee engagement in the companies in the services sector. The study used 150 respondents from Pakistan. The results showed that fairness perception, employee self-efficacy and self-esteem have a strong influence on employee engagement as well as other aspects of transformational leadership. It means that, only those employees which have higher levels of self esteem and self-efficacy and who think that they were fairly treated show high engagement levels when afforded inspirational motivation.

Subsequently, Kurt, Duyar and Calik (2012) tested the relationship of principal leadership with teacher self-efficacy which is a variable that has proved to have an influence on student achievement. It focused on collective efficacy. The study used 813 respondents who were teachers from Turkey. The findings revealed that transformation leadership together with collective efficacy shape teachers' self-efficacy. A significant relationship of principal's transformational leadership with teachers' self-efficacy beliefs existed. In support of that finding, Yukl (2013) stated that the ability of a vision to bring about motivation is dependent on the follower's belief that it is achievable.

Kovjanic, Schuh, Jonas, van Quaquebeke, and van Dick (2012) had a contribution which tried to combine and extend theory on self-determination and transformational leadership. It suggested that the fulfilment of follower's basic necessities (competence, relatedness and autonomy) which mediated the relationship of transformational leadership and outcomes of employee (self-efficacy, job satisfaction and commitment to the leader). The study involved employees from Germany (410) and Switzerland (442). Results revealed that the necessity to fulfill competence is the only mediating variable of the relationship of transformational leadership with occupational self-efficacy.

Aggarwal and Krishnan (2013) examined the relationship when they reported a study on how the subordinates' self-efficacy is improved by their use of strategies to manage impressions on supervisors and the influence of transformational leadership in improving subordinates' self-efficacy. It used 112 respondents from the IT industry in India. The findings revealed that transformational leadership with the subordinates' self-efficacy have a positive relationship.

Gregersen, Vincent-Höper and Nienhaus (2014) studied whether occupational self-efficacy is a mediating variable of the effect of transformational leadership on perceived negative well being. The study used 339 respondents from Germany. The results showed that the ccupational self-efficacy level does not moderate the influence of transformational leadership behavior on perceived negative well being.

Hamidianpour, Esmaeilpour, Alizadeh and Dorgoee (2014) examined and explained the influence of transformational leadership on work engagement, self-efficacy, individual performance and social competence. The study used 216 participants from nine hospitals in South Kalimantan Province of Indonesia. The findings revealed that transformational leadership significantly influenced self-efficacy. The implication is that transformational leadership encourages employees to do a job better than what followers want and even more than what has been anticipated earlier. It means that leaders can inspire followers to have trust and faith in themselves that they can perform the job better.

This finding is in line with what Yukl (2013) who mentioned that the transformational leader should be leading by example. Another approach a leader can provide inspiration to follower commitment is exemplary behaviour in his day-to-day dealings with them (role modelling).

Elkhani, Soltani and Ahmad (2014) identified the external factors which influence enteprise resource planning (ERP) system acceptance. This was motivated by the awareness that transformational leadership and ERP system self-efficacy are crucial external factors that can have an impact on the ERP system acceptance. The study used 151 participants from the The results revealed that transformational leadership can either directly or indirectly influence perceived usefulness via the assimilation of self-efficacy in a positive manner.

Chou, et al. (2015) explored the link between transformational leadership and subordinates' intention to adopt new technology with self-efficacy as the mediator. It used 346 participants form 7 Taiwanese companies. The results revealed that transformational leadership positively exerts its influences on subordinates' intention to adopt new technology. In addition, the result also supports that self-efficacy fully mediates the relationship of transformational leadership with the subordinates' intention to adopt new technology.

Masterova, Prochazka and Vaculik (2015) investigated the relationship of a leaders' self-efficacy, effectiveness and transformational leadership. The study used 32 leaders and 604 subordinates from two Czech Republic universities. The findings were not in favour of the relationship of self-efficacy with transformational leadership.

Ninkovic´ and Floric (2016) explored the relationship of transformational school leadership, teacher self-efficacy with perceived collective teacher efficacy. The study used 120 participants who were Serbian Secondary School Teachers. The results revealed that transformational school leadership with teacher self-efficacy independently predicted teacher collective efficacy.

Caillier (2016) developed a causal model to discover precisely how transformational leadership with goal clarity work together to impact, extra-role behaviors, self-efficacy and intentions to leave the employer. The study used 913 participants from the USA. The results revealed that goal clarity completely mediates the relationship of transformational leadership with both extra-role behaviors and self-efficacy. Goal clarity was also found to be a partial mediator of the relationship of transformational leadership with intentions to leave the employer. Furthermore, self-efficacy positively influences the extra-role behaviors and intentions to leave the employer.

Jacque-Corey (2017) established the Youth Transformational Model to find out the positive relationship that leadership self-efficacy, acquaintance, and social intelligence have on transformational leadership skills. The study used 142 participants who were students from the USA. The findings established that while the formal leadership role had a positive relation to the experience of the leader and self-efficacy, only the experience of the leader had a relationship with leadership self-efficacy, social intelligence, and transformational leadership skills. The results further revealed that leadership self-efficacy and social intelligence partially mediates the expereince of the leader and transformational leadership skills relationship.

2.4.2. Self-efficacy with employee innovation

Schutte (2010) studied whether the initiative intended to escalate self-efficacy meant for transformational leadership leads to additional self-efficacy for transformational leadership and higher levels of transformational leadership. The study used 118 Managers from Australia. The findings revealed that managers in the mediation state displayed considerably greater levels of self-efficacy for transformational leadership and higher transformational leadership scores compared to the control group managers after the test.

Hsiao, Chang, Tu and Chen (2011) examined the influence of self-efficacy on innovative work behaviour (IWB). The study used 546 participants from the northern region of Taiwan. The findings revealed a strong positive relationship of teacher's self-efficacy with innovative work behaviour. Additionally, teachers demonstrating higher levels of self-efficacy had better work innovative

behaviour. Based on the finding, the authors therefore concluded that teacher's self-efficacy is a significant predictor of IWB.

Hsu, Hou and Fan (2011) studied the relationship of creative self-efficacy, optimism and innovative behaviour, with optimism as the moderator. It was a longitudinal study which involved 120 participants from Taiwan. The results revealed that employees portraying increased levels of creative self-efficacy in turn exhibit increased levels of innovative behaviour in the workplace. Optimism had no direct bearing on employee's innovative behaviour, instead it was a moderator. The study advises that in the course of innovative activities, employees could display creative behaviour to perform their duties with success and thus enhancing the optimism and creative self-efficacy.

Tierney and Farmer (2011) conducted a longitudinal study about the development of creative self-efficacy in a continuing work setting. The study used 503 respondents over a 6-month period from a state sponsored provider of social services in the USA. The results showed that escalations in perceived creative expectation and employee creative role identity from superiors were related with improved feeling of employee ability to embark on creative work. Conflicting to what was anticipated, employees who faced more necessity for creativity in their work in fact reported a lesser feeling of efficacy for embarking on work that is creative. The findings indicate that escalations in creative self-efficacy matched with growths in performance that is creative as well.

Beeftink, van Eerde, Rutte and Bertrand (2012) investigated how self regulation and an innovative thinking style are linked with self reported architect's accomplishment. The study used 276 respondents from Holland. The findings discovered that an innovative reasoning style was directly and indirectly related, by means of self-efficacy to design, to the self assessment of becoming a prosperous designer. Furthermore, the research revealed that self-regulation, by means of self-efficacy had an indirect relation to being a prosperous designer and directly linked with becoming a prosperous businessperson.

Ma, Cheng, Ribbens and Zhou (2013) studied the impact of ethical leadership on the creativeness of employees with the knowledge sharing and self-efficacy as mediating variables. The study used 309 respondents from China. The results revealed that ethical leadership is positively correlated with the creativity of employees and self-efficacy and knowledge sharing mediated the relationship.

Yu and Yuwen (2013) examined the effect of employee self-efficacy on the innovative behaviour and expected positive performance outcome (EPPO) as well as the influence of team conflict management styles. These are competitive and cooperative conflict management style, on the relationship of innovative behaviour and employees' expected positive performance outcome and also its direct effect

on the performance of the team. The study used 391 respondents from Taiwan. The findings revealed a positive relationship of self-efficacy, EPPO with innovative behaviour at an individual level. Furthermore, the study indicated that the expected positive performance outcome is somewhat a mediator of the relationship of self-efficacy with innovative behaviour. The findings further revealed that at a group level, the team's cooperative conflict style is positively linked to the performance of the team. The team conflict management style moderated the relationship of innovative behaviour and expected positive performance outcome of employees.

Bullough, Renko and Myatt (2014) examined the effects of entrepreneurial self-efficacy, perceived danger, and resilience on entrepreneurial intents in hostile conditions. The study used 272 participants in Afghanistan. The findings suggested that perceived danger is negatively correlated to an individuals' entrepreneurial intents, but slightly less so among highly resilient individuals. They further suggest that even under war conditions, individuals develop entrepreneurial intents if they are able to grow from difficulty (resilience) and trust in their entrepreneurial capabilities.

Momeni, Ebrahimpour and Ajirloo (2014) evaluated the influence of self-efficacy of employees on their innovative behaviour. The study used 500 employees from the Social Security Organization in Iran. The results confirmed the hypothesis "employees self-efficacy influences innovative job behavior" which had the level of significance P<0.05 level and parameter factor of 0.427. This indicated that self-efficacy positively influences innovative job behaviour.

Along the same lines, Slåtten (2014) studied factors which are determinants of creative self-efficacy. These are job related, leader related and self-related factors. The study used 345 respondents from Norway. The results showed that job related factors were more significant determinants of creative self-efficacy. The self-related and leader related factors (transformational leadership) followed behind. The findings further exhibited that creative self-efficacy positively influences activities related to innovation.

Employers appreciate the entrepreneural side of the employees because it makes them creative. This is supported by Dalborg and Wincent (2014) who demonstrated the importance of self-efficacy in comprehending the reason why an attractive idea may lead to a development of passion in an entrepreneur. The study used 103 respondents from Sweden. The results revealed that self-efficacy mediates the impact of pull-entrepreneurship on initiator passion signifying that being drawn towards prospects to establish a business is indirectly required for the development of entrepreneural passion. Instead, pull-entrepreneurship escalates self-efficacy and helps the individual in the development of the typical entrepreneural skills.

Hirst, van Knippenberg, Zhou, Zhu and Tsai (2015) investigated the relationship of in-role performance and creativity related to team exploration and exploitation climate respectively and its effect with the moderation of creative self-efficacy and domain-specific performance respectively. The study used 387 participants from Australia, Taiwan and China. The findings revealed that with the high individual self-efficacy, creativity benefits and there is a diminishing performance for the team climate. This therefore confirms a positive relationship between the constructs.

Malik, Butt and Choi (2015) proposed that rewards that are extrinsic in nature designed for creativity have a positive effect in predicting creative performance only in instances where the individuals have high creative self-efficacy and appreciate such rewards as significant. They further proposed that such rewards (extrinsic) have a positive effect on the intrinsic motivation of individuals who have an internal locus of control, therefore improving their creative performance. The study was conducted in Pakistan using 181 employee-supervisor dyads from two private universities. The results revealed that creative self-efficacy significantly predicts creative performance and significantly moderates the relationship between creative performance and extrinsic rewards.

Huang, Krasikova and Liu (2016) studied the effect of the leaders' creative self-efficacy (CSE) on the followers' creativeness. The study used 650 participants from an Information Technology sector in the United States of America. The findings revealed that the leaders' CSE has an indirect influence on the followers' inventiveness through the ability of the leader to encourage creativity and the follower to be engaged during the creative process. Furthermore, the leader–member exchange (LMX) strengthens the relationship of subordinates' creative process engagement with leader encouragement of creativeness. Therefore, if there is a higher LMX, the leader CSE will most probably show a stronger positive influence on employees' creativeness via the encouragement of creativity by the leader.

Dampérat, Jeannot, Jongmans and Jolibert (2016) investigated the influence of creative self-efficacy and its determining factors as well as the impact of social proximity on creative collective efficacy. In addition, they studied the predictive validity of creative collective efficacy using perceived originality of teams' creative outcomes. The study used 208 participants from France. The findings confirmed that in a creativity session, the belief in collective creative ability influences the originality of the production. The belief of each individual in his or her own creative ability (self-efficacy) influences the originality of the collective production through creative collective efficacy only.

Hu and Zhao (2016) examined how creative self-efficacy mediates the relationship of innovation of employees with knowledge sharing having job satisfaction as a moderator. It used 274 participants from China. The results revealed that creative self-efficacy and knowledge sharing had a positive

correlation with employee innovation and that creative self-efficacy mediates the effects of innovation and knowledge sharing.

Mohammadi and Azizmalayeri (2016) investigated the relationship of creativity with self-efficacy in the coaches involved in sports education. The study used 90 participants from the city of Malayer in Iran. The results revealed a significant relationship of creativity with self-efficacy.

Chen, Li and Leung (2016) explored how and when the supervisors' support is able to promote innovative behavior through using intrinsic motivational factors in moderation and employees' general self-efficacy and internal locus of control as boundary conditions. The study used 486 participants from various industries in China. The findings revealed that general self-efficacy had an enhancing moderator influence, such that it improved the mediated relationship of supervisor support with employee innovative behavior through intrinsic motivational factors.

Thundiyil, Chiaburu, Li and Wagner (2016) tested a model connecting Chinese employees' positive and negative affect and creative self-efficacy with supervisor-rated creative performance in Chinese business. The study used 459 leader-subordinate dyads as participants in China. The results suggest that creative self-efficacy has a positive influence on creative performance.

Puente-Diaz (2016) did a review of empirical studies investigating the precursors and outcomes of creative self-efficacy in the workplace. The evaluation utililized the notion of social cognitive theory and individual creative action as the regulatory outlines to put creative self-efficacy in the innovation and creativity process, describe innovation and creativity, investigate the measurement criteia of creative self-efficacy, study the consequences and precursors of creative self-efficacy, identify knowledge gaps and provide practical implications and recommendations for future research. The results revealed that creative self-efficacy as a process variable is a significant contributor in clarifying how several personal and organizational factors impact outcomes that are creative through their effect on creative self-efficacy.

More recently, Saboor, Ilyas and Rehman (2017) investigated the influence of capability development and empowerment on the innovative behaviour of employees. They furthermore examined worker's creative self-efficacy in a moderating role. The study used 200 participants from IT firms in Pakistan. The findings revealed that employee's creative self-efficacy moderates the relationship of empowerment with capability development and the innovative behaviour of employees.

Murugesan and Jayavelu (2017) investigated the effect of the Big 5 personality traits and self-efficacy (SE) on entrepreneurial intentions (creativity). The study used 248 participants in India. The results confirmed a high relationship of entrepreneurial intention and self-efficacy. The finding is supported by Akanbi (2013) who stated that the individual's belief in their ability (self-efficacy) to succeed in any course is what a prospective entrepreneur requires to have success in his course.

2.4.3. Transformational leadership with employee innovation

According to Yukl (2013) the empirical investigation pertinent for the concepts of transformational leadership has been mainly positive but limited studies have explored the fundamental effect processes (mediation) that explain the positive association of leader behaviour with follower performance. The studies below will try and investigate what actually is the underlying cause of the positive relationship between these two variables.

Cheung and Wong (2011) studied the moderating effect of the leaders' task and relations support on the relationship of transformational leadership with the levels of the creativity of the followers. The study used 182 respondents from Hong Kong. The findings revealed a positive relationship of transformational leadership with the creativity of followers tending to be stronger in instances where there is high levels of the leader's task and relations support.

Nusair, Ababneh and Bae (2012) provided an indepth comprehension of how transformational leadership is related to the innovative behaviour of subordinates. The study used 358 participants from Jordan. The results revealed that, transformational leadership explained 47% in the deviation of the innovative behaviour of followers. Furthermore, the findings revealed that the workplace mediating variable had a significant influence on the approaches of the research participants towards the transformational leadership behaviour of their superiors and their innovative behaviour

García-Morales, Jiménez-Barrionuevo and Gutiérrez-Gutiérrez (2012) scrutinized the influence of transformational leadership on the performance of the organization through the dynamic competencies of innovation and organizational learning. The study used 168 respondents from Spanish firms. The results revealed that transformational leadership positively impacts the performance of the organization through innovation and learning within the organization. Learning within the organization influences the performance of the organization positively. This happens directly and indirectly with the help of organizational innovation. Finally, organizational innovation impacts the performance of the organization positively.

Paulsen, Callan, Ayoko and Saunders (2013) added to the knowledge of how transformational leaders impact Research and Development team consequences about being more innovative. They focused on the group identification role as a mediator of innovative consequences. The study used 104 participants from an R&D organization in Australia. The findings showed that creativity perceived support and group identification exerted the same amount of independent effects as full mediators of the relationship of transformational leadership with the innovation of the team.

Eisenbeiß and Boerner (2013) conducted an analysis of the dependence of subordinates on the leader as an appropriate negative side-effect in the relationship of transformational leadership with the creativity of subordinates and developed an integrative outline on comparable negative and positive effects of transformational leadership. The study used 416 respondents from Germany. The results of the study revealed that transformational leadership stimulates the creativity of subordinates but at the same time escalates the dependency of followers which in turn causes their ability to be creative to decline. This adverse indirect consequence weakens the positive influence of transformational leadership on the ability of the subordinates to be creative. The finding is contrary to what Yukl (2013) mentioned about transformational leaders in that they perhaps do more to empower subordinates and make them independent of the leader.

Hoch (2013) investigated the relationship of shared leadership, as a collective within innovative behavior and team leadership as well as precursors of shared leadership with regards to the empowering leadership, composition of the team and vertical transformational leadership. The study used 184 respondents from two companies in the United States of America. The findings revealed that vertical and shared leadership, not team composition, was positively related with the innovative behavior at team level. Empowering and vertical transformational leadership and the composition of the team with regards to integrity were positively associated to shared leadership.

Afsar, Badir and Saeed (2014) explored the mediating effect of psychological empowerment and the role of self-construal (independent and interdependent) in moderation on the relationship of transformational leadership with the innovative work behavior (IWB) of employees. The study used 726 respondents from China. The findings indicated that psychological empowerment mediates the relationship of transformational leadership with IWB.

Nijstad, Berger-Selman and de Dreu (2014) examined the CEO's transformational leadership in the dissent innovation relation of Top Management teams (TMTs). The study used 196 participants from 36 TMTs in Netherlands. The results revealed that dissent of the minority was positively correlated to the number of innovations executed by the TMTs. That said, radical innovations were only observed

under high levels of transformational leadership. It was further established that transformational leadership had this outcome because it was positively related with participative safety. These results signify that minorities stimulate innovation and that with the use of transformational leadership, CEOs can build a climate in which the input of those in minority is converted into radical innovation.

Similarly, Weng, et al. (2015) examined the effect of transformational leadership on the innovative behaviour of nurses with the mediating effect of organizational climate. The study used 439 nurses from hospitals in Taiwan. The results revealed that organizational climate has an important effect on innovation behaviour. They also revealed that transformational leadership has unintended consequences on innovative behaviour with the innovation and safety climates for patients as mediator.

The positive relationship of organizational climate with innovation is confirmed by Hamidianpour, Esmaeilpour, Alizadeh and Dorgoee (2015) who conducted a study which investigated the impact of emotional intelligence with organizational climate on employee creativeness and the entrepreneurial alignment within management. The study used 183 respondents from Iran and the findings also established that organizational climate is a precursor for innovative behaviour.

Jyoti and Dev (2015) investigated the relationship of transformational leadership with employee creativity. The study used 202 respondents from the communications industry in India. The findings revealed a positive relationship of transformational leadership with the creativity of employees, with learning orientation as a moderator.

Akbar, Sadegh and Chehrazi (2015) investigated the influence of transactional and transformational leadership approaches on the innovation and creativity of employees. The study used 244 employees from a university in Iran. The findings revealed a positive direct and significant effect of transactional leadership on employee creativity. Another positive direct and significant effect of transformational leadership on employee creativity was found. Overall, the results accentuated the role of transformational and transactional leadership styles on innovation and employee creativity.

Tung (2016) investigated transactional, ambidextrous, and transformational leadership and their relationship to the creativity of employees and the extent to which psychological empowerment and promotion focus are consistent with previous studies that identify their significant impact on employee creativity. The study used 427 participants from Chinese companies. The results revealed that ambidextrous and transformational leadership styles have a significant effect on the creativity of employees.

Choi, Kim, Ebrahim Ullah and Kang (2016) examined the relationship of transformational leadership (TL) and the innovative behaviour of Korean workers. The study used 356 participants from the Korean manufacturing industry. The findings revealed that, transformational leadership had a significant relation to both knowledge sharing and the innovative behaviour of employees. The results also revealed that knowledge sharing was a mediator and perceived organizational support (POS) a positive moderator in the relationship of transformational leadership with employee innovation.

Chang (2016) extended the research and management innovation theory by going further than the analysis at a single level. It focused on the management of innovation at the lower level in the hierarchy of the organization and developed a multi-level outline and studied the effects of multi-level transformational leadership (TFL) on management. The study used 592 participants from the banking services firms in Taiwan. The findings revealed that unit-level transformational leadership was positively correlated to unit-level management innovation.

Bai, Lin, and Ping Li (2016) explored the cross-level links of the transformational behaviour of the leader of the team and the creativity of employees in a context of the team. They further recommended a three-path cross-level model which is a mediator whereby knowledge sharing and team conflict are involved. The study used 427 participants from China. The results revealed that knowledge sharing and team conflict served as two consecutive mediating variables of the cross-level links. This study emphasizes the important role of transformational leadership as a cross-level enabler for the creativity of employees.

Similarly, Li, Mitchell and Boyle (2016) examined the relationship of group-focused transformational leader behaviour and the innovation of the team. The study used 251 participants from Hong Kong. The results revealed that at group-level, transformational leadership and interdependence of task had a positive correlation with innovation of individuals. Only the combined group-focused transformational leadership was established to be positively correlated with the innovation of the team.

Another group scenario was studied by Feng, Huang and Zhang (2016) who examined the relationship of transformational leadership with innovation in groups. The study used 948 respondents from China. The results showed that, transformational leadership positively impacts innovative behaviour of the group, and radical change was the moderator of this relationship, not incremental change. Incremental and radical change also had a positive relationship with the innovative behaviour of the group.

Khalili (2016) studied the relationship of transformational leadership with innovation and the creativity of employees. In addition, this study examined employee perceptions of a supportive climate for

innovation as a moderator. The study used 1172 respondents from Iran. The results revealed positively significant relationships of transformational leadership and innovation and the creativity of employees.

Prasad and Junni (2016) examined the impact of CEO's transactional and transformational leadership on innovation within the organization with environmental dynamism as the moderator. The study used 163 participants from the United States of America. The findings revealed that CEO's transactional and transformational leadership behaviours positively impacts innovation within the organization.

Al-Husseini and Elbeltagi (2016) studied the influence of transformational leadership on process and product innovation, and the dissimilarities between these influences in private and public tertiary education organizations. The study involved 439 teaching staff and 10 leaders from the tertiary education sector in Iraq. The results showed that transformational leadership plays a fundamental part in improving process and product innovation and that the leadership style would be perfect in an Iraqi educational environment as it would encourage approaches for developing innovation in both sectors.

Zhu and Mu (2016) established and confirmed a theoretical model of the perception of followers of transformational leadership as a precursor to their innovative behaviour in organizations. The study used 212 participants who were employees from various industries in China. The results revealed that transformational leadership produces positive and significant impacts on followers' innovative behavior and knowledge sharing is the full mediator of this relationship. The results further indicate that the positive relationship of transformational leadership with the innovative behaviour of followers is enhanced only when followers possess high psychological capital.

Wang, Kim and Lee (2016) conceptualized and confirmed a combined model for the relationship of creativity of the team and cognitive diversity. The model involved transformational leadership as a moderator and intrinsic motivation for the team as a mediator. The study used 346 member–team leader dyads across 62 teams in South Korea. The results revealed that transformational leadership is a moderator of cognitive diversity's direct influence on intrinsic motivation for the team and has an indirect influence on creativity of the team through intrinsic motivation for the team. The effects were negative when TL was low and positive if it was high.

Chen, Zheng, Yang and Bai (2016) investigated the powers behind innovation in an organization, mainly the CEO's transformational leadership as it affects internal and external social capital in top management teams. The study used 90 participants from top management teams in China. The results revealed a relationship that is positive of transformational leadership with innovation in the organizations with both internal and external social capital as mediators.

More recently, Masood and Afsar (2017) constructed and confirmed a conceptual model associating innovative work behaviour with transformational leadership through numerous intervening variables. The study used 587 nurses and 164 doctors from public hospitals in Pakistan. The results revealed that transformational leadership influences the nurses's psychological empowerment, which in turn impacted both knowledge sharing behaviour and intrinsic motivation. Knowledge sharing behaviour and intrinsic motivation positively influences innovative work behaviour.

2.4.4. Transformational leadership, self-efficacy with employee innovation

Halvorsen (2011) investigated the influence of transformational leadership on innovation implementation behaviour and the psychological mechanisms of this relationship. Affective change commitment, normative change commitment and perceived computer self-efficacy were tested as potential mediators of the relationship. The study used 75 employees of a private medical clinic in Norway. The results revealed that transformational leadership had a positive influence on innovation implementation behaviour, and that normative commitment to change was a significant mediator of this relationship. There was however, no support for the proposed mediators affective commitment to change and perceived computer self-efficacy. The results from this study point out the importance of transformational leadership in promoting employees' consistent and committed use of a particular innovation, and suggest that employees' feelings of obligation are a significant psychological mechanism of this relationship.

Ghafoor, Qureshi, Azeemi and Hijazi (2011) studied the link of transformational leadership, learning orientation with the creativeness of employees. Additionally, creative self-efficacy was studied as a mediator in the relationship of transformational leadership and learning orientation with creativity. The study used 176 respondents from the banking sector in Pakistan. A significant relationship of transformational leadership, performance-orientation and creativeness of employees was found. The results revealed that performance orientation relationship with the creativeness of employees is acknowledged as a mediator whereas transformational leadership's relationship with the creativeness of employees is not favoured as a mediator.

Dörner (2012) explored how innovative work behaviour of employees affect their task performance and how managers can influence innovative work behaviour. The study used 772 participants from the Swiss insurance company. Results suggest that transformational leadership positively affects innovative self-efficacy. Similarly, Wang, Tsai and Tsai (2014) explored the relationships of transformational leadership, creative self-efficacy, job complexity, creative role identity and creativity. The study used 395 respondents who were supervisor-employee dyads from Taiwan. Results revealed

that the supervisor's transformational leadership positively influences employee creative self-efficacy and creativity.

Slåtten (2014) investigated three different stages of elements that lead to creative self-efficacy. Those are, job-related, self-related and leader-related. Further to that, it aimed to investigate the influence of creative self-efficacy on innovative activities. The study used 345 respondents from the hospitality sector in Norway. The findings revealed that autonomy or job-related factors was the most significant cause of creative self-efficacy. Learning orientation or self-related factors followed and transformational leadership or leader-related factors came in last. Moreover, creative self-efficacy positively influences innovative activities.

Mittal and Dhar (2015) observed the impact of transformational leadership on the innovation of employees in small and medium-sized IT firms with the mediating effect of creative self-efficacy and moderation of knowledge sharing wherein a transformational leader has a tendency of influencing the innovation of employees (CSE). The study used 348 respondents who were manager-employee dyads in India. The results revealed that CSE is a mediator of the transformational leadership with employee creativity.

Kao, Pai, Lin and Zhong (2015) adopted a dual perspective methodology that studies both socio-political and motivational perspectives to further stimulate the impact of transformational leadership on innovative behaviour of frontline employees in offering a service. The study used 1665 participants from hair salons in Taiwan. The results revealed that the creative self-efficacy, perceived organizational climate for innovation and expected image gains are full mediators of the relationship of transformational leadership and employee's innovative behaviour in offering a service. Transformational leadership has a positive influence on the employees' perceived organizational climate for innovation, which in turn improves the employee's innovative behaviour in offering a service through both socio-political or expected image gains and motivational or creative self-efficacy as mediators.

Similarly, Jaiswal and Dhar (2015) examined the role transformational leadership has in the prediction of employee creativeness. It also investigated climate for innovation as a mediator and the moderating role of creative self-efficacy. It used 372 employees together with their direct superiors in the Indian hospitality industry. The results revealed that transformational leaders can create the climate for innovation that encourages creativity of employees. Furthermore, creative self-efficacy was found to have a moderating effect in the relationship of employee creativity and climate for innovation. The

results revealed that a high degree of creative self-efficacy in employees will entice creative behaviour if given a supportive climate for innovation.

Lamiaa (2015) examined the relationship of transformational leadership with the climate for innovation within the organization, creative self-efficacy and creativity. The study used 500 subordinates and 150 supervisors from the hotel industry in Egypt. The findings showed that transformational leaders bring about creativity and the climate for innovation within an organization.

Another study in the Egyptian hotel industry was by Mohamed (2016) who examined the effects of transformational leadership on hotel employees with its effect on satisfaction, climate for innovation, creative self-efficacy and creativity. The study used 650 respondents. The findings revealed that transformational leadership is experienced in Egyptian hotels; in addition, it helps in bringing about an innovation climate and also encourages satisfaction and the creativity of employees. However, an insignificant relationship of transformational leadership with creative self-efficacy of employees was found.

Jaiswal and Dhar (2016) studied creative self-efficacy as a mediator in predicting the creativity of employees by means of transformational leadership. The study used 424 respondents from the hotel industry in India. The findings suggest that transformational leaders encourage their subordinates to be creative. Additionally, creative self-efficacy was found to have a significant moderating role in the relationship of transformational leadership with the creativity of employees. The findings also revealed that employees reporting to transformational leaders are more probable to choose creative behaviour when high creative-self-efficacy is perceived.

2.5. Summary and conclusion

This chapter studied prior empirical research that studied the relationship of transformational leadership, self-efficacy with employee innovation. In laying a foundation, the constructs were defined and then followed by the precursors of employee innovation. The conclusions that can be drawn from the literature review are grouped into the following categories: transformational leadership with self-efficacy, self-efficacy with employee innovation, transformational leadership with employee innovation and finally transformational leadership, self-efficacy with employee innovation combined.

It may also be noted that most literature is from the USA, Asia and some in North Africa. No literature was found from the sub-Saharan Africa. The variables may be construed differently in these different geographical regions resulting to a difference in the study results of similar variables. This may be due

to different cultural settings and practices. The same could be said with the different business sectors such as IT, services, manufacturing, R&D etc.

The latter is confirmed by Dowling, Festing and Engle (2013) who stated that the common thread in research of cross-cultural management is the notion that there are dissimilarities between management practices in several countries and that the particular environment is of importance in the explanation of these differences in context. This viewpoint does not accept the attitude of researchers who adopt universal transferability of management of knowledge.

2.5.1. Transformational leadership with self-efficacy

Generally, prior studies reveal that transformational leadership with self-efficacy have a positive relationship. Some studies revealed that self-efficacy mediates the relationship of transformational leadership and other constructs such as perceived work stress, job satisfaction, extra-role performance and intention to adopt new technology. Other studies also revealed that the relationship of transformational leadership with self-efficacy can be mediated by goal clarity, competence fulfilment and relational identification with the supervisor. One study revealed no relationship between the constructs in predicting perceived negative well-being whilst another revealed no relationship between the construct but focused on the leader's self-efficacy not employee. The results from prior studies suggest that transformational leaders will positively impact on the employee's confidence in their ability to perform in their roles.

2.5.2. Self-efficacy with employee innovation

All the studies that were examined in the literature review established that self-efficacy significantly influences employee innovation either as a mediator or in a direct relationship. It therefore implies that employees who have confidence in their ability to perform their roles are highly probable to display innovation or creativity. Management should therefore strive to improve employee's self-efficacy by making them acquainted with their work and environment using interventions like induction and fully explaining the job description that outlines the roles and responsibilities. This will increase their ability to perform in their role thus enabling innovativeness.

2.5.3. Transformational leadership with employee innovation

The results of the empirical studies in the literature review indicate a positive relationship between the constructs. In some studies, this relationship was mediated or moderated by psychological

empowerment, learning orientation and innovation and safety climates. The results suggest that managers espousing a transformational leadership style will influence the employee innovation in some cases with the involvement of the mediating variables. Leaders should also create and enabling climate for innovation. The results from the studies are supported by Smith, Vrba and Botha (2016) who mentioned that transformational leaders are similar to charismatic leaders but are notable by their special capability to bring about change and innovation.

2.5.4. Transformational leadership, self-efficacy with employee innovation

The empirical studies in the literature review have contradictory views on the relationship of the constructs. Out of the seven studies that were reviewed, five showed a positive relationship and in some cases self-efficacy is a moderator or mediator. Two studies revealed an insignificant relationship between the constructs with self-efficacy in mediation whilst another study showed an insignificant relationship. An observation that was made is that the relationship of these constructs may differ depending on the circumstances. Therefore, leaders should understand the context when applying the transformational leadership style in order to encourage employee creativity mediated by self-efficacy. Again, it is imperative for leaders to create an 'innovation climate' where employees can innovate through their transformational leadership style.

2.5.5. Conceptual model for the study

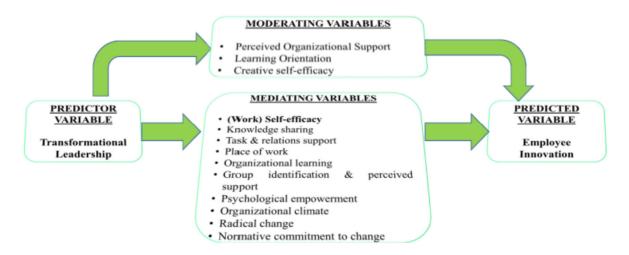


Figure 2. Conceptual model for the relationship between TL and EI

Drawing from the literature review, a Conceptual model has been developed for the study to further elaborate on the relationship of transformational leadership (predictor variable) with employee innovation (predicted variable). Self-efficacy was the only mediating variable chosen for the study.

According to the literature, there are other mediating variables that have been found such as knowledge sharing, task and relations support, place of work, organizational learning, group identification and perceived support, psychological empowerment, radical change, normative commitment to change and organizational climate. The previous studies found that these mediating variables positively mediated the relationship between transformational leadership and employee innovation.

Further to that, the previous studies revealed that there are moderating variables such as perceived organizational support, learning orientation and creative self-efficacy that also enhance the relationship of transformational leadership with employee innovation. The model will provide benefits in two ways, firstly; it will assist future researchers of these variables in choosing possible mediator or moderator variables that could be studied to establish the level of significance of the relationship between the predictor and predicted variables. Secondly, the South African Local Government management will know which mediator and moderator variables to put more emphasis on in pursuit of innovation in their workplaces if transformational leadership is adopted as a preferred leadership style.

The next chapter will outline the research methodology used when conducting this research study. It comprises of a purpose of the investigation, a description detailing the composition of the sample and the measurement instruments that have been used in the study. The research design, collection of data and data analysis are also described in the chapter.

CHAPTER 3 - RESEARCH METHODOLOGY

3.1. Introduction

The chapter provides a methodological framework of this research study which incorporates the purpose of this empirical study, sample, measurements, research design, research method and the procedure for data analysis.

3.2. The purpose of this empirical study

The study comprise of four objectives but the main one is to empirically examine the causative relationship of transformational leadership, self-efficacy with employee innovation in the South African local government sector.

3.3. Sample

A cross-sectional research design was carried out in order to test the hypotheses and address the set research objectives. Data was collected manually in the South African local government sector namely the City of Umhlathuze and Mandeni municipalities using survey questionnaires. Both sites are based in the KwaZulu Natal province. They were chosen because of staff compliments over 1000 and combined will be able to provide a sample required by the study. The total population for both research sites was 3340. Initially, three sites were identified. Only two sites approved the researcher's request to conduct the study which meant that the population was reduced. This led to a reduction in the sample frame from 350 to 164 and the resultant sample from 300 – 141.

3.4. Measuring instruments

The data was collected using three instruments namely; transformational leadership inventory, work self-efficacy scale and the multi-dimensional measure of innovative behaviour. The demographic items were added as mediating variables.

3.4.1. Transformational leadership

The transformational leadership behaviour inventory (TLI) was used as a measuring instrument for transformational leadership and it was developed by Podsakoff, et al. (1990). According to Podsakoff,

MacKenzie and Moorman (1996, p.265), "the instrument was designed to measure six key dimensions of transformational leadership namely; articulating a vision, providing an appropriate model, fostering the acceptance of group goals, high performance expectations, providing individualized support, and intellectual stimulation."

Podsakoff, et al. (1990) mention that "the measuring instrument contains twenty two-items measured on a five-point Likert scale. Items are preceded by "My leader" The first item reads ("....Has provided me with new ways of looking at things which used to be a puzzle for me.")." The highest score is 110 and the low score is 22. A high or low score will signify the magnitude of transformational leadership for the respondent's leader.

The Cronbach's coefficient alpha for this study was .94 which confirms the reliability of the instrument. The validity has been ascertained by the number of studies that have used it before (Connell, 2005; Hardy, Arthur, Jones, Shariff, Munnoch, Isaacs & Allsopp, 2010; Lian & Tui, 2012). The measuring instrument was chosen because of its reliability and validation.

3.4.2. Self-efficacy

A work self-efficacy scale (WSES) was used as a measurement for work self-efficacy that was developed by Avallone, et al. (2007). According to Pepe, et al. (2010, p.204), "it is based on two factors, which are relational willingness and commitment. It measures observations regarding specific work spheres such as the capability to manage interpersonal relations (colleagues and direct superiors), to work with colleagues with different traits and experiences, to efficaciously behave in the work setting, to learn new working approaches, to respect schedules and work time limits and to achieve assigned objectives."

Pepe, et al. (2010, p.204) mentioned that "the measuring instrument comprises of ten-items measured on a five-point Likert scale. The first item talks about a tendency towards or attention to relationships with colleagues and superiors (e.g. "....achieve goals that will be assigned")." The highest score is 50 and the lowest score is 10. A high score represents employee's belief in the ability to carry out the given duties and a low score symbolizes skepticism in one's ability to carry out the duties.

The Cronbach's coefficient alpha for this study was .94 which confirmed the reliability of the measuring instrument. The instrument was validated by the number of studies that used it (Hubbard & Hewett-Avison, 2014; Colombo & Zito, 2014). The measuring instrument was chosen because of its reliability and validation.

3.4.3. Employee innovation

A multi-dimensional measure of individual innovative behaviour (MDM-IInB) was used to measure employee innovation and it was developed by Kleysen and Street (2001). According to Kleysen and Street (2001), "it is based on five dimensions namely; opportunity exploration, generativity, formative investigation, championing and application. It measures each factor with items related to the five dimensions."

Kleysen and Street (2001) further mentioned that "the measuring instrument comprises of fourteen items measured on a six-point Likert scale. Items begin with "In your current job, how often do you? The first item reads ("....look for opportunities to improve an existing process, technology, product, service or work relationship?")." The highest score is 84 and the lowest score is 14. A high or low total represents the extent of innovativeness among the survey participants.

The Cronbach's coefficient alpha for this study was .94 which confirmed the reliability of the measuring instrument. The instrument was validated by the number of studies that used it (Colombo & Zito, 2014; Hubbard & Hewett-Avison, 2014). The measuring instrument was chosen because of its reliability and validation.

3.4.4. Demographic items

The questionnaire comprised of seven items that could have mediated the relationship of transformational leadership with employee innovation. A mediator variable is "the variable that causes mediation in the dependent and the independent variables. In other words, it explains the relationship between the dependent variable and the independent variable" (Solutions, 2017). The items were gender, race, age, education, tenure, type of work (core / support) and seniority at work (management / non-management) and post level.

The study comprised of 53-items in total. All the measures appear in the questionnaire presented as Appendix A.

3.5. Study design

A cross-sectional design was chosen for the study. It is best suitable to studies that are aimed at establishing the predominance of a situation, phenomenon, attitude, problem by taking a cross-section of the studied population. They are beneficial in finding a complete 'picture' as it is at the time the

study is conducted. They are "designed to study some phenomenon by taking a cross-section of it at one time". Such studies are cross-sectional with regard to both the study population and the time of investigation (Kumar, 2011).

This was a quantitative study. A quantitative study design is specific, well structured, have been tested for their validity and reliability, and can be unambiguously recognised and defined. A quantitative study design has more clarity and distinction between designs and methods of data collection (Kumar, 2011). It is also known as the "positivist approach which underlies the natural-scientific method in human behavioural research and holds that research must be limited to what we can observe and measure objectively. That is, that which exists independently of the feelings and opinions of individuals. It strives to formulate laws that apply to populations and that explain the causes of objectively observable and measurable behaviour. This type of research is appropriate if there is large objective data to be analyzed consisting of numbers" (Welman, et.al. 2005).

3.6. Collection of data

The scholar decided to embark on this research study in Leadership due to the interest that has developed in the field. In the previous study conducted by the researcher involving leader member exchange (LMX), self-efficacy and innovative behaviour, the statistical results from the regressions revealed an R square of .20. This showed that LMX and self-efficacy only had a 20% effect on innovative behaviour. It indicated that 80% of innovative behaviour is explained by other constructs hence the inclusion of transformational leadership as one of the predictor variables for this study. Upon completion of the study, the researcher would like to offer the recommendations to the leadership of local government sector which will hopefully assist them in some of the leadership challenges they are faced with.

The starting point of the project was to find the research sites or workplaces from which to collect the data. The research sites or workplaces chosen comprised of literate staff where a sample could be drawn from so that the respondents can complete the questionnaires independently. This prerequisite was of paramount importance to the researcher as the priority was for the participants to respond without interference. Once the study sites or workplaces were identified, the researcher sought permission through a written request to conduct a study to the organization's Senior Management. The approval letters are attached as Appendix B.

The researcher relied on the help from the HR departments or Municipal Manager's office within the respective research sites who assisted with sending out email briefs about the study which included a participant information sheet (Appendix E).

No questionnaires were completed electronically. The researcher printed enough copies and dropped them in both research sites to minimize the cost for the participating site or workplace. The confidentiality of the completed surveys was maintained as the researcher collected them personally and will safe-keep them until the University requests them for archiving.

A total of 164 questionnaires were returned unspoilt. The sampling frame comprised of 164 questionnaires that were completed and numbered (1-164). After that, a table of 164 random numbers was produced and 141 questionnaires were randomly chosen using the table (see appendix D). A table of random numbers is a "random arrangement of the 10 digits 0 - 9, usually grouped together in sets of two to five digits arranged in rows and columns (Solutions, 2017).

The collected data was captured by the researcher on an Excel spreadsheet that was readily prepared for all the measuring instruments involved in the study. The researcher had to pay careful attention to this process to minimise errors as they can have an impact on the data analysis and results. Collected data was forwarded to a Statistician for analysis using the SPSS statistical package of which the results thereof will be reported on in the next chapter.

3.7. Ethical considerations

The participant information sheet displayed the Ethical Clearance approval number: <u>HSS/2003/016M</u> that was issued by the UKZN Humanities and Social Sciences Research Ethics Committee for this research project (see Appendix F). The email brief also included a guide on how to complete the questionnaire. The individuals who were willing to participate in the study confirmed by email and were handed a questionnaire.

3.8. Data analysis

The sample demographics were produced first in order to have a better understanding about the diversity of the sample. This was achieved by means for continuous variables (i.e. gender, race etc.).

Thereafter, the descriptive statistics comprising of means and standard deviations were produced or calculated for transformational leadership and self-efficacy. The intention was to get an understanding of the group's perspective on each construct. According to Sekaran and Bougie (2013), "the mean is a measure of central tendency that offers a general picture of the data without unnecessarily inundating one with each of the observations in the data set." A binomial test was conducted for employee

innovation on order test if a significant proportion of the participants responded fairly often or more to the questions.

Cronbach's coefficient alpha was used to calculate the information on reliability and it was presented. This was to evaluate the efficiency of the measuring instruments to the constructs. Cronbach's coefficient alpha is a "reliability coefficient that indicates how well the items in a set a positively correlated to one another. It is computed in terms of the average inter-correlations among the items measuring the concept. The closer Cronbach's alpha is to 1, the higher the internal consistency reliability" (Sekaran & Bougie, 2013). The acceptable score for business research is .70. The validity of each measuring instrument was tested by the number of times it had been used in previous studies.

A one-sample test was conducted for all the constructs in order to test whether mean scores is significantly different to a scalar value. A correlation analysis was calculated in order to determine the relationship of the constructs. Sachdeva (2009) states that "correlations provide an estimation of the extent to which the changes in one construct are associated with changes in another. A coefficient of – 1.00 represents a perfect, inverse relationship. A coefficient of +1.00 indicates a perfect, direct relationship and a coefficient close to zero indicates no relationship at all".

The ANOVA test was performed for a one-way analysis of variance to measure the homogeneity of the mean scores between the support versus non-support functions and managerial versus non-managerial functions. Cresswell, Ebersohn, Eloff, Ferreira, Ivankova, Jansen and Plano Clark (2016) mentions that ANOVA is used when there are more than two independent groups that need to be compared on a single quantitative measure or score. A T-test (statistic) was used in this instance.

Finally, a multiple regression model was executed to measure relationship combinations of the variables. According to Cresswell, et al. (2016), "multiple regression analysis is used in situations where more than one independent variable is used to predict a single dependent variable". The beta coefficients have been used to compare the relative strength of the various predictors within the prototype. According to Curini (2013), "The beta coefficients are all measured in standard deviations, instead of the units of the constructs, therefore they can be compared to one another. In other words, the beta coefficients are the coefficients that you would obtain if the outcome and predictor constructs were all transformed to standard scores, also called z-scores, before running the regression".

3.9. Summary

The chapter outlined the research methodology for the study. It comprised of a cross sectional research design, study sample which was drawn using a simple random sampling technique. The chapter further outlined the measurements namely; transformational leadership behaviour inventory (TLI), work self-efficacy scale and the multi-dimensional measure of individual innovative behaviour. The technique used to analyse data was also described in-depth by detailing all the tests that were conducted in the analysis.

The next chapter will present the results from the collected data. It comprise of the sample demographics, descriptive statistical analysis of the constructs, correlations, inferential statistical analysis and the relationship of transformational leadership with employee innovation mediated by self-efficacy.

CHAPTER 4 - STUDY RESULTS

4.1. Introduction

The chapter presents the results of the statistical analysis of the survey conducted in accordance with the previous chapter. The information contained is the sample demographics, descriptive statistical analysis of the constructs, correlations, inferential statistical analysis and the relationship of transformational leadership with employee innovation mediated by self-efficacy. The key objective of this chapter is to analyse the relevant information which will enable the subsequent Chapter to address the research objectives outlined for the study.

4.2. Demographics of the sample

The sample size was 141 drawn from 2 study sites in the South African local government sector (City of Umhlathuze and Mandeni Municipality). The collected data underwent a statistical analysis in order to examine the relationship of the constructs. The participants' demographics will be reported on with regards to their location, gender, race, roles (core / support, management / non-management), education and post-level. These will indicate the diversity of the sample.

Table 4.1 Participants per research site

Research site	Number of participants	Percentage
City of Umhlathuze	106	75.2
Mandeni Municipality	35	24.8
Total	141	100

In total there were 141 participants of which 75.2% (106) were from the City of Umhlathuze and 24.8% (35) from Mandeni Municipality.

Table 4.2 Pooled gender statistics

Gender	Number of participants	Percentage
Male	52	36.9
Female	89	63.1
Total	141	100

Out of the 141 participants, 36.9% (52) were male and 63.1% (89) were female.

Table 4.3 Pooled racial statistics

Black	Coloured	Indian / Asian	White	Missing	Total
69.5%(98)	5.7%(8)	15.6 %(22)	8.5%(12)	0.7%(1)	100%(141)

The pooled data sample Blacks in majority with 69.5% (98) of the total sample. Indians / Asians followed on 15.6% (22), Whites with 8.5% (12), Coloureds with 5.7% (8). One participant was unaccounted for equating to 0.7% of the total sample.

Table 4.4 Roles - core / support

Roles	Number of participants	Percentage
Core	33	23.4
Support	108	76.6
Total	141	100

Most participants are involved in support services with 76.6% (108) representation in the sample and 23.4% (33) work in core roles for their respective municipalities.

 Table 4.5
 Roles - management / non-management

Roles	Number of participants	Percentage
Management	30	21.3
Non-Management	111	78.7
Total	141	100

The majority of the participants are involved in non-management roles with 78% (111) representation in the sample and 21.3% (30) are at management level.

Table 4.6 Education

Education level	Number of participants	Percentage
<matric< td=""><td>2</td><td>1.4</td></matric<>	2	1.4
Matric	33	23.4
First degree / Diploma	69	48.9
Higher degree / Diploma	36	25.5
Missing	1	0.7
Total	141	100

Most participants 48.9% (69) hold a first degree / diploma. They are followed by the higher degree / diploma with 25.5% (36). Participants with matric only made up 23.4% (33) of the sample and only 1.4% (2) participants who are less than matric. One participant was unaccounted for equating to 0.7 % of the sample.

Table 4.7 Post level

Post level	Number of participants	Percentage
Level 1	19	13.6
Level 2	40	28.6
Level 3	48	34.3
Level 4	27	19.1
Level 5	6	4.3
Missing	1	0.7
Total	141	100

The majority of the participants 34.3% (48) are on level 3 followed by level 2 with 28.6% (40), level 4 with 19.1% (27), level 1 with 13.6% (19) and lastly level 5 with 4.3% (6). One participant was unaccounted for equating to 0.7% of the sample.

The section hereunder presents the descriptive statistics for each variable or construct.

4.3 Descriptive statistics of the variables

Descriptive statistics for all the measuring instruments TLI, WSES and MDM-IInB are presented and discussed starting with the predictor variables first.

Table 4.8 Descriptive statistics for each item

Item number Sample size		Mean	Standard deviation
	Transformational Lea	ndership Behaviour Inventory (TI	LI)
TLI 1	141	3.43	1.030
TLI 2	141	3.48	1.066
TLI 3	141	3.48	1.011
TLI 4	139	3.38	1.106
TLI 5	141	3.73	1.189
TLI 6	141	3.57	1.117
TLI 7	140	2.81	1.319

TLI 8	141	3.65	1.220
TLI 9	141	3.50	1.106
TLI 10	141	3.65	1.001
TLI 11	141	3.70	1.108
TLI 12	141	3.63	1.221
TLI 13	140	3.53	1.089
TLI 14	140	3.49	1.116
TLI 15	140	2.69	1.276
TLI 16	140	3.40	1.162
TLI 17	140	3.64	1.074
TLI 18	140	3.42	1.100
TLI 19	140	3.51	1.070
TLI 20	140	3.68	1.146
TLI 21	138	3.59	1.157
TLI 22	140	3.72	1.200
	Work S	elf-Efficacy scale	
WSES 1	140	4.08	.922
WSES 2	141	4.20	.950
WSES 3	141	4.20	.896
WSES 4	141	4.06	.838
WSES 5	141	4.18	.889
WSES 6	141	4.27	.853
WSES 7	141	4.28	.887
WSES 8	141	4.30	.870
WSES 9	140	4.27	.812
WSES 10	141	4.29	.883

The results presented in Table 4.8 show the mean scores for the measuring instruments used for the predictor variables. The Work Self-Efficacy Scale has the highest mean scores for its eighth ("Thinking of future work, how well can you...... have good relationships with direct supervisors") and tenth items ("Thinking of future work, how well can you...... work in a team"). These scores indicate high optimism that the participants had about their ability to do their work even in future.

This result is supported by Hsu, et al. (2011) who studied the relationship of creative self-efficacy, optimism and innovative behaviour, with optimism as the moderator. The results revealed that employees showing high levels of creative self-efficacy exhibit high levels of innovative behaviour in the workplace. Optimism had no direct bearing on employee's innovative behaviour, instead it was a moderator. The study advises

that in the course of innovative activities, employees could display creative behaviour to perform their duties with success and thus enhancing the optimism and creative self-efficacy.

The TLI showed the lowest mean scores for its seventh item ("My leader Acts without considering my feelings") and fifteenth item ("My leader Treats me without considering my personal feelings"). These scores indicate that most participants agree that their leaders do show compassion towards them. This result is supported by Waqas Raja (2012) who studied how transformational leadership is a catalyst to increasing employee work engagement in the firms in the services sector. The results revealed that self-esteem, employee self-efficacy, and fairness perception (compassion) strongly influence employee work engagement and other aspects of transformational leadership. The implication is that, only those employees with higher level of self-esteem, self-efficacy and who assume that they are fairly treated (with compassion) exhibit high work engagement when given inspirational motivation, idealized.

For the Multi-Dimensional Measure of Innovative Behaviour instrument, a binomial test was performed to test if a significant proportion of the participants responded fairly often or more to the questions.

Table 4.9 Binomial test for MDM-IInB

			BIN	OMIAL TEST		
		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
InB1	Group One	<= 3	26	.19	.50	.000
	Group Two	> 3	114	.81		
	Total		140	1.00		
InB2	Group One	<= 3	27	.19	.50	.000
	Group Two	> 3	113	.81		
	Total		140	1.00		
InB3	Group One	<= 3	42	.30	.50	.000
	Group Two	> 3	97	.70		
	Total		139	1.00		
InB4	Group One	<= 3	27	.19	.50	.000
	Group Two	> 3	113	.81		
	Total		140	1.00		
InB5	Group One	<= 3	33	.24	.50	.000
	Group Two	> 3	106	.76		
	Total		139	1.00		
InB6	Group One	<= 3	32	.23	.50	.000
	Group Two	> 3	108	.77		
	Total		140	1.00		

InB7	Group One	<= 3	40	.29	.50	.000
	Group Two	> 3	96	.71		
	Total		136	1.00		
InB8	Group One	<= 3	32	.23	.50	.000
	Group Two	> 3	108	.77		
	Total		140	1.00		
InB9	Group One	<= 3	33	.24	.50	.000
	Group Two	> 3	107	.76		
	Total		140	1.00		
InB10	Group One	<= 3	31	.22	.50	.000
	Group Two	> 3	109	.78		
	Total		140	1.00		
InB11	Group One	<= 3	36	.26	.50	.000
	Group Two	> 3	104	.74		
	Total		140	1.00		
InB12	Group One	<= 3	35	.25	.50	.000
	Group Two	> 3	105	.75		
	Total		140	1.00		
InB13	Group One	<= 3	35	.25	.50	.000
	Group Two	> 3	103	.75		
	Total		138	1.00		
InB14	Group One	<= 3	35	.25	.50	.000
	Group Two	> 3	104	.75		
	Total		139	1.00		

The above test indicate that a significant 81% of the participants, at least fairly often, look for opportunities to improve existing processes or be innovative in their workplaces (p<.0005).

Below is the Cronbach's coefficient alpha for each measuring instrument.

Table 4.10 Cronbach's coefficient alpha per instrument

Instrument	Cronbach alpha
TLI	.94
WSES	.94
MDM-IInB	.94

The reliability coefficient (Cronbach alpha) for the TLI was .94, the WSES .94 and the MDM-IInB was .94. On the basis of the values of alpha, these measures can all be considered reliable as .70 is the acceptable alpha for business research.

Table 4.11 One sample test of all the constructs

	One sample test									
	95% Confidence Interval of the									
				Diffe	rence					
	t	df	Lower	Upper						
TL	8.144	140	.000	.53186	.4027	.6610				
SE	20.091	140	1.21284	1.0935	1.3322					
INN	9.343	139	.000	.71740	.5656	.8692				

The above test shows that the participants significantly agree that transformational leadership is existent in their organizations. There is also a high overall self-efficacy amongst the participants and there is a significant high frequency (more than just sometimes) that employees are displaying innovative tendencies.

4.4 Correlations

This section below presents the relationship of the constructs (transformational leadership, self-efficacy with employee innovation) and the Pearson correlations will be used to express it.

Table 4.12 Correlation matrix for TL, SE and EI

	TL		SE		EI	
	Correlation	Sig.	Correlation	Sig.	Correlation	Sig.
TL			.459	.000	.330	.000
SE	.459	.000	-	-	.392	.000
EI	.330	.000	.392	.000	-	-

TL and SE have a medium correlation of .459 with the level of significance less than p<.005 signifying a positive relationship of the constructs. This result concurs with Aggarwal and Krishnan (2013) who examined the relationship when they reported a study on how the subordinates' self-efficacy is improved by using impression management approaches on supervisors and the influence of transformational leadership in improving the self-efficacy of the subordinate. The findings revealed a positive relationship of transformational leadership with the self-efficacy of the subordinates.

TL and EI have a small correlation of .330 with the level of significance less than p<.005 signifying a positive relationship. This result agrees with Khalili (2016) who investigated the relationship of transformational leadership with innovation and the creativity of employees. In addition, this study Page | 51

examined employee perceptions of a supportive climate for innovation as a moderator. The results revealed positively significant relationships of transformational leadership and innovation and the creativity of employees.

SE and EI have a medium correlation of .392 with the level of significance less than p<.005 signifying a positive relationship. This result is in agreement with Momeni, et al. (2014) who evaluated the influence of self-efficacy of employees on their innovative behaviour. The results confirmed the hypothesis "employees self-efficacy influences innovative job behavior" which had the level of significant P<0.05 level and parameter factor of 0.427. This showed that self-efficacy has a positive influence on innovative job behaviour.

Overall, the correlation matrix confirm a significantly positive relationship of all the constructs.

4.5 Inferential statistics

Anova and T-tests were performed in order to test for significant differences in the three instruments across categories of demographic variables. The results are reported in Tables 4.11 and 4.12 below.

Table 4.13 Comparing mean scores of core and support functions

Group statistics							
	N	Mean	Std. Deviation	Std. Error Mean			
Core business	33	3.7429	.50367	.08768			
Support business	108	3.4674	.83241	.08010			
Core business	33	4.1909	.68162	.11865			
Support business	108	4.2195	.73017	.07026			
Core business	32	4.2979	.77210	.13649			
Support business	108	4.1935	.94713	.09114			

	T-Test									
	Levenes' test for equality of variances T-test for equality of						ans			
							Mean			
	Equal variances	F	Sig.	t	df	Sig.	difference			
TL	assumed	9.855	.002	1.801	139	.074	.27559			

	not assumed			2.321	89.135	.023	.27559
SE	assumed	.148	.701	200	139	.842	02864
	not assumed			208	56.305	.836	02864
INN	assumed	1.393	.240	.569	138	.570	.10436

There is a significant difference in the agreement that transformational leadership is practiced depending on whether they are part of core business or support services (t(89.135) = 2.321, p=.023). Those from core business (M=3.743) indicate that transformational leadership is practiced more than those from support services (M=3.467).

Table 4.14 Comparing mean scores of managerial and non-managerial positions

	Group statistics								
N Mean Std. Deviation Std. Error Mean									
Management	30	3.8112	.64674	.11808					
Non-management	111	3.4564	.79244	.07522					
Management	30	4.4100	.34775	.06349					
Non-management	111	4.1596	.78013	.07405					
Management	30	4.3863	.68334	.12476					
Non-management	110	4.1713	.95832	.09137					

	T-Test									
	Levenes' test for ea	quality of va	ariances		Γ-test for equ	uality of me	eans			
							Mean			
	Equal variances	F	Sig.	t	df	Sig.	difference			
TL	assumed	2.490	.117	2.256	139	.026	.35482			
	not assumed			2.534	54.925	.014	.35482			
SE	assumed	6.278	.013	1.710	139	.090	.25044			
	not assumed			2.568	108.582	.012	.25044			
INN	assumed	3.289	.072	1.150	138	.252	.21492			

There was also a significant difference in the agreement with regards to transformational leadership and its existence based on whether the participants are in management or non-management roles (t(139) = 2.256,

p=.026). Those in management believe that transformational leadership is in existence (M = 3.811) more than non-management (M = 3.456).

There was also a difference in the agreement with regards to the participant's belief in their ability to do the job (self-efficacy) between those in management or non-management roles (t(108.58) = 2.568, p=.012). Those in management have more self-efficacy (M=4.410) than non-management (M=4.160). No significant differences were found across gender, education or race.

4.6 Relationship between TL with EI and the mediation of SE

The relationship will be discussed based on the correlation and regression analysis as reported in Table 4.12. Below is the reporting of the relationship based on the totals scores.

Table 4.15 Regression analysis (TL with SE)

D	\mathbf{D}^2	1.12	Std. error of the	D2 1		Level of
K	R ²	Adjusted R ²	estimate	R ² change	F.	significance
.459	.210	.205	.63924	.001	37.037	.000

Transformational leadership is accounting for 21% (R^2 =.210) of the variance in self-efficacy representing a small effect, F=37.037, the level of significance is p<.0005. Transformational leadership is therefore a significant predictor of self-efficacy (β =.424, the level of significance is p<.0005). The model is statistically significant.

This result agrees with Hairudinor, et al. (2014) examined and explained the influence of transformational leadership on work engagement, self-efficacy, individual performance and social competence. The findings revealed that transformational leadership significantly influenced self-efficacy. The implication is that transformational leadership encourages employees to do a job better than what followers want and even more than what has been anticipated earlier. It means that leaders can inspire followers to have trust and faith in themselves that they can perform the job better.

Table 4.16 Regression analysis (SE with EI)

P	\mathbf{P}^2	Adjusted R ²	Std. error of the estimate	R ² change	F	Level of significance
.392	.153	.147	.83899	.001	24.997	.000

Self-efficacy accounts for 15% (R^2 =.153) of the variance in employee innovation which has a small effect, F=24.997, the level of significance is p<.0005. Self-efficacy is a significant predictor of employee innovation (β =.495, the level of significance is p<.0005). The model is statistically significant.

The result is in line with Hsu, et al. (2011) who studied the relationship of creative self-efficacy, optimism and innovative behaviour, with optimism as the moderator. The results revealed that employees displaying increased levels of creative self-efficacy portray increased levels of innovative behaviour in the workplace. Optimism had no direct bearing on employee's innovative behaviour, instead it was a moderator. The study advises that in the course of innovative activities, employees could display creative behaviour to perform their duties with success and thus enhancing the optimism and creative self-efficacy.

Table 4.17 Regression analysis (TL with EI)

Ī		\mathbf{D}^2		Std. error of the	D 2 .	-	Level of
	R	R ²	Adjusted R ²	estimate	R ² change	F	significance
ſ	.330	.109	.102	.86074	.001	16.863	.000

Transformational leadership is accounting for 10% (R^2 = .109) of the variance in employee innovation which has a small effect, F=16.863, the level of significance is p<.0005. Transformational leadership is therefore a significant predictor of employee innovation (β =.424, p<.0005). The model is statistically significant.

The result agree with Al-Husseini and Elbeltagi (2016) who studied the influence of transformational leadership on process and product innovation, and the dissimilarities between these influences in private and public tertiary education organizations. The results showed that transformational leadership plays a fundamental part in improving process and product innovation and that the leadership style would be perfect in an Iraqi educational environment as it would encourage approaches for developing innovation in both sectors.

However, the small effect of the relationship must be understood in context as Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi and Rezazadeh (2013) confirmed that knowledge management and organizational learning are possible mediating varibales to the relationship. They play an integral bridge part in connecting transformational leadership and innovation within the organization. If transformational leaders disregard the knowledge management and organizational learning they cannot directly improve innovation within the organization. This study will use self-efficacy as a mediating variable which is depicted in the model below.

Table 4.18 Regression analysis (TL, SE and EI)

			Std. error of the			Level of
R	\mathbb{R}^2	Adjusted R ²	estimate	R ² change	${f F}$	significance
.427	.182	.170	.82760	.001	15.257	.000

When making reference to Table 4.17 above, it is noted that the model consist of TL with EI is R^2 =.109. When adding self-efficacy as a mediator in Table 4.18, R^2 increased slightly to .182. An R^2 of .109 represents as small effect and an R^2 of .182 still has a small effect. The level of significance of p<.0005 though makes the model statistically significant.

The result concurs with Mittal and Dhar (2015) who observed the impact of transformational leadership on the innovation of employees in small and medium-sized IT firms with creative self-efficacy mediating and of knowledge sharing moderating wherein a transformational leader has a tendency of influencing the innovation of employees (CSE). The results revealed that CSE is a mediator of the relationship of transformational leadership with the creativity of employees.

4.7 Summary

The chapter presented the results of the statistical analysis of the survey. It also statistically described the constructs, correlations, inferential statistics and finally the relationship between transformational leadership and employee innovation mediated by self-efficacy. The data that has been analyzed will be essential when addressing the objectives that were set out for the study.

Two municipalities formed the study sites and were in the pooled sample with the City of Umhlathuze contributing more (75.2%) of the sample. The females dominated the pooled data sample with (63.1%). Africans were in majority with (69.5%) followed by Indian / Asians (45.6%), Whites (8.5%) and lastly Coloureds with (5.7%).

All the measurement instruments for the study were reliable as they had a Cronbach alpha of .94 which is over the acceptable .70 for this particular study. Correlations amongst the three variables revealed a significant positive relationship of all the constructs. The inferential statistics revealed that there was a significant difference in the agreement amongst participants that transformational leadership is practiced. This depended on whether they are part of core business or support services. Those from core business indicated that transformational leadership is practiced more than those from support services.

A similar trend was observed with the managerial and non-managerial positions. The analysis revealed that there was no significant differences across gender, education or race. Finally, the model of a relationship of transformational leadership with employee innovation mediated by self-efficacy was tested using the regression analysis which found it to be statistically significant but with a small effect. The oncoming chapter will put more emphasis in discussing the results based on the study objectives and make recommendations.

CHAPTER 5 - DISCUSSION, CONCLUSION AND RECOMMENDATIONS

The aim of the study was to investigate the impact of transformational leadership mediated by self-efficacy on employee innovation in the South African local government sector. A literature review was conducted to establish the relationship of the variables, the data was collected through a questionnaire survey and analyzed using the SPSS statistical package. This chapter will discuss the results that were reported in Chapter 4. This discussion focuses on the research objectives specified in the orientation Chapter of this study and will also confirm the hypothesis.

The recommendations will emanate from findings (literature review and analysis) of the study. The limitations and goal achievement of this research will also be emphasized upon in order to lay a platform for future scholars of this topic to improve on it when studying it further.

5.2 Limitations and goal achievement

The first limitation for the study is that the population was limited to Mandeni Municipality and the City of Umhlathuze as the study purely focused on the two research sites. The South African local government sector spreads over 9 provinces comprising of 278 municipalities with 8 metropolitan councils, 44 district and 226 local municipalities. Secondly, a sample of 141 is reasonable for the purposes of conducting this study but may not be representative of the whole South African local government sector.

Due to the aforementioned limitations, there should be caution when generalizing the research results across the South African local government sector. Different geographical locations in South Africa have different cultures which may have an impact in the interpretation of the variables and thus having a bearing on the results. In support of the above, Rkdahl and Rjesson (2011) found that the innovation capabilities, which are the capabilities to do unique things and to be adventurous with ideas, fluctuate among organizations. Stated slightly differently, Dowling, et al. (2013) whose viewpoint does not accept the attitude of researchers who adopt universal transferability of management of knowledge

This research may have laid the foundation for a similar study to be conducted in other South African municipalities outside KwaZulu-Natal. It therefore requires management to have awareness of the climate and culture they operate under in order to make informed decisions in implementing the results of this research.

The goal of this study was to achieve all the research objectives that were set out. They were all achieved by conducting the literature review, gathering data that was analyzed based on the objectives and the presentation of those results.

5.3 Discussion

The discussion below will be based on each study objective as set out in the orientation chapter.

5.3.1 First objective

The objective was to empirically examine the causative relationship of transformational leadership with self-efficacy.

The results of the correlation analysis shown in Table 4.12 revealed that transformational leadership with self-efficacy have a medium correlation of .459 and the level of significance less than p<.005 signifying a positive relationship of the constructs. The regression analysis revealed a statistically significant model which showed that transformational leadership accounts for 21% ($R^2 = .210$) of the variance in self-efficacy representing a small effect, F=37.037, the level of significance is p<.0005. Transformational leadership is therefore a significant predictor of self-efficacy (β =.424, the level of significance is p<.0005). The null hypothesis (H_0) is rejected and conclude that there is a significant relationship of transformational leadership with self-efficacy. The alternative hypothesis (H_1) is accepted.

The results back the previous studies in the literature review which revealed a positive relationship of the constructs. A managerial implication is that transformational leaders will impact positively on the employee's self-confidence in their capability to perform in their roles. This is confirmed by Yukl (2013) who stated that the transformational leader motivates and transforms followers by the creation of an awareness about the significance of task outcomes, encouraging them to go beyond their own self-interests for the benefit of the company or team thus inspiring their higher order needs.

5.3.2 Second objective

The objective was to empirically examine the causative relationship of self-efficacy with employee innovation.

The results of the correlation analysis shown in Table 4.12 revealed that self-efficacy with employee innovation have a medium correlation of .392 and the level of significance less than p<.005 signifying a

positive relationship. The regression analysis revealed a statistically significant model which showed that self-efficacy accounts for 15% (R^2 =.153) of the variance in employee innovation which has a small effect, F=24.997, the level of significance is p<.0005. Self-efficacy is therefore a significant predictor of employee innovation (β =.495, the level of significance is p<.0005). The null hypothesis (H_0) is rejected and conclude that there is a significant relationship of self-efficacy with employee innovation. The alternative hypothesis (H_1) is accepted.

The results back most previous studies in the literature review which revealed a positive relationship of the constructs. A managerial implication is that management should strive to improve employee's self-efficacy by making them acquainted with their work and environment using interventions like induction and fully explaining the job description that outlines the roles and responsibilities. This will increase their ability to perform in their role thus enabling innovativeness.

5.3.3 Third objective

The objective was to empirically examine the causative relationship of transformational leadership with employee innovation.

The results of the correlation analysis shown in Table 4.12 revealed that transformational leadership with employee innovation have a small correlation of .330 and a level of significance less than p<.005 signifying a positive relationship. The regression analysis revealed a statistically significant model which showed that transformational leadership accounts for 10% (R^2 =.109) of the variance in employee innovation which has a small effect, F=16.863, the level of significance is p<.0005. Transformational leadership is therefore a significant predictor of employee innovation (β =.424, p<.0005). The null hypothesis (H_0) is rejected and conclude that there is a significant relationship of transformational leadership with employee innovation. The alternative hypothesis (H_1) is accepted.

The results back most previous studies in the literature review which revealed a positive relationship of the constructs. A managerial implication is that managers espousing a transformational leadership style will influence employee innovation in some cases with the involvement of the mediating variables. Leaders should also create and enabling climate for innovation.

5.3.4 Main objective

The objective was to empirically examine the causative relationship of transformational leadership, work self-efficacy with employee innovation in the South African local government sector.

The overall results in the correlation matrix presented in Table 4.12 revealed that transformational leadership with employee innovation mediated by self-efficacy have a significant positive relationship. The regression analysis also revealed a statistically significant model of the three constructs with an R^2 of .182 which had a small effect. The null hypothesis (H_0) is rejected and conclude that there is a significant relationship of transformational leadership, work self-efficacy with employee innovation. The alternative hypothesis (H_1) is accepted.

The results back most previous studies from previous literature which revealed a positive relationship of the constructs. A managerial implication is that leaders should understand the context when applying the transformational leadership style in order to encourage creativity of employees with self-efficacy as the mediator. It is imperative for leaders to create an 'innovation climate' where employees can innovate through their transformational leadership style. Although the relationship had a small effect statistically, the predictor variable still has a significant impact on employee innovation.

5.4 Literature gap

The variables have been extensively studied in prior research but they have not been examined in a South African context. Most of the available literature is from the European, North Africa and Asian countries. A few studies were from America and Australia. No literature from the sub-Saharan Africa was found. It is therefore important to understand the relationship of the constructs within the South African context due to different cultures and beliefs across the globe. A leadership style can be construed differently by respondents from different geographical regions and also on developed versus developing countries.

5.5 Summary of the study

The aim of the research was to study the impact of transformational leadership mediated by self-efficacy on employee innovation within the South African local government sector. For the researcher to examine this relationship, previous literature was used to show what had been studied before on the relationship of the constructs. It was imperative to do so as the literature gap was identified which is the fundamental focus for this particular research. A Conceptual model (Figure 2) for this particular study was also developed based on the findings of the previous literature. Pooled data for both research sites was analyzed and the results were presented with the emphasis on correlation and regression analysis which showed whether the relationship of the constructs is statistically significant or not. The previous studies and the findings helped in preparing the discussions that were centred on the research objectives. Furthermore, the results enabled the researcher to confirm the hypothesis.

5.6 Conclusion

According to the statistical results, transformational leadership had a small practical significance on employee innovation even though the relationship had statistical significance. The addition of self-efficacy as a mediator had a small practical significance but it was established that the relationship was statistically significant.

It therefore indicates that transformational leadership alone is not sufficient to boost employee innovation. Other mediator and moderator variables may have to be considered for it to have a medium to strong effect as depicted in the Conceptual model (Figure 2). This is informed by the effect of the main regression model which was weak. Although the model was found to have statistical significance, transformational leadership and self-efficacy proved to be weak predictors of employee innovation. This may imply that there may be other variables outside this study which are strong predictors of employee innovation. This was ascertained by the value of $R^2 = .182$, which indicated that transformational leadership with self-efficacy explains only 18% of employee innovation, which indicates that 82% is accounted for by other variables.

5.7 Summary of contribution

The emphasis of the research was on employee innovation and how it could be enhanced by transformational leadership with self-efficacy as the mediating variable in the South African local government. The purpose of this research was to investigate the impact of transformational leadership mediated by self-efficacy on employee innovation in the South African local government sector. Previous literature which studied the constructs was examined. For this particular research, a quantitative study was carried out by means of a cross-sectional research design in two municipalities from the South African local government sector where questionnaire surveys were used for data collection. The attention of the analysis was with regression and correlation analysis.

The findings confirmed that all the relationships were positively correlated. A regression analysis depicted four models aligned to the research objectives which were all found to have statistical significance. Although the previous studies and the correlation analysis were consistent in what they established, the model of regression for transformational leadership with employee innovation as well as the model of all the constructs combined placed the extent of the relationships into perspective. It revealed that transformational leadership alone has a small impact on employee innovation. When self-efficacy was added into the relationship, the influence transformational leadership had on employee innovation was still small.

The study offers the leadership for the South African local government with an understanding of the relationship of transformational leadership with a mediating role of self-efficacy on employee innovation. The results will add to the body of knowledge by furnishing a better enlightenment of how the transformational leadership style enhance employee innovation. Moreover, the study will add value to academic research by introducing a prototype that clarifies the relationship of transformational leadership, self-efficacy with employee innovation in the South African local government context.

5.8 Recommendations and consideration for future research

The results of the statistical analysis indicated that influence that transformational leadership has on employee innovation is small in terms of practical significance. When self-efficacy was added as a mediator, it slightly enhanced the relationship numerically but still had a small practical significance. When the local government management implement the findings of the study, they should take into cognisance that on its own, transformational leadership will not be sufficient to effect employee innovation. They need to examine other predictor variables such as perceived organizational support, authentic and ethical leadership. Employee engagement could also be considered as a mediating variable instead of self-efficacy.

Local government management can also be mindful of the antecedents of innovation presented in Chapter 2 which can be combined with the predictor variables in order to enhance employee innovation. According to prior studies hereunder, employee innovation can be regarded as the consequence of strategy, organizational culture, organizational climate, style of leadership, human resource practices and people (employees) within the organization (Zhand & Begley, 2011; Rkdahl & Rjesson, 2011; Birken, et al., 2015; Ryan & Tipu, 2013; Díaz-García, et al., 2013; Büschgens, et al., 2013; Changa, et al., 2011; Slåtten, 2011; Engelen, et al., 2014; Kaliappen & Hilman, 2014; Prieto & Perez-Santana, 2014; Mokhber, et al., 2015). These have been studied before and found to be antecedents of innovation within an organizational setting.

Table 4.8 presented the statistics that exhibit the mean scores for all the measurements included in the study. Local government management should focus on the high and low mean scores. The Work Self-Efficacy Scale had the highest mean scores for its eighth and tenth items. These scores indicate high optimism that the participants had about their ability to do their work even in future. This is also supported by Hsu, et al., (2011) who established that employees displaying increased levels of creative self-efficacy portray increased levels of innovative behaviour in the workplace. It therefore implies that Local government management should strive to improve employees' self-efficacy by acquainting them with their work and environment using interventions such as induction and fully explain the job description that outline the roles and responsibilities. This will increase their ability to perform in their roles thus enabling innovativeness.

The Transformational Leadership Index had the lowest mean scores for its seventh and fifteenth items. These scores indicate that most participants agree that their leaders do show compassion towards them. Management should capitalize on these elements as they carry a positive connotation from employees that transformational leadership is existent in their respective workplaces.

The Binomial test in Table 4.9 indicated that a significant 81% of the participants, at least fairly often, look for opportunities to improve existing processes or be innovative in their workplaces. The local government management should take advantage of that readiness to innovate by employees. It could be through creating the right culture, climate and adopting a leadership style(s) that enhance innovation. This study has proven that transformational leadership alone is not a significant predictor of employee innovation therefore bringing other leadership styles into the picture may be of benefit.

The findings from a study by Noruzy, et al. (2013) support the importance of transformational leadership in innovation within the organizations in the manufacturing sector. They contended that transformational leaders could grow innovativeness in the organizational setting and they could adopt intellectual stimulation and inspirational motivation, which are imperative for innovation within an organization. Therefore, apart from the results that had a small practical effect, transformational leadership still has an impact on employee innovation.

Sethibe (2016) mentioned that it is obvious that both transactional and transformational leadership approaches positively impacts employee innovation. Prior research has shown that the transformational leadership approach is more effective at idea generation stage of the innovation process, while the transactional leadership style is related with the implementation stage of the innovation process. It is therefore recommended that management adopt both transformational and transactional leadership styles, depending on the stage of the innovation process they are faced with. A statistically significant but weak relationship of transformational leadership with employee innovation that was depicted by the regression model may be due to the nature of the environment the respondents are exposed to. Municipalities are not the most ideal environments in terms of idea generation therefore the weak relationship would be accepted in terms of what Sethibe (2016) revealed. A transactional leadership style may be the more suitable under the circumstances. A transformational leadership style could be ideal in a R&D or IT developer scenario where there is more generation of ideas.

Ultimately, employee innovation is a strategic imperative. To achieve it, there has to be a concerted effort as established by Birken, et al. (2015) whose findings revealed that upper management increase middle management's commitment through directly communicating with middle management that implementing innovation is a strategic imperative. They added that there has to be an allocation of implementation

policies and practices including human resources, training, performance reviews, budget, and encouraging middle management to leverage human resources and performance reviews in order to succeed in the implementation of innovation. Management in the South African local government should take the latter into cognisance.

When making reference to the conceptual model (Figure 2) for the study that was developed in Chapter 2, the Management in the South African local government should also consider other mediating variables as well as the moderator variables in order to enhance employee innovation.

Looking forward, Sethibe (2014) stated that the limitation in our knowledge discovered today provide opportunities for tomorrow's discoveries and research. One of the beneficiaries of this research will be the academia which will derive value since one of the future research considerations is the population's geographical scope. For this particular research, the population was restricted to two municipalities from KwaZulu-Natal and may not be representative of the whole South African local government sector. An ideal sample could be randomly selected from various South African municipalities. A more representative sample will enable better generalizability of the research results across the South African local government sector. Future research could also consider other constructs that could positively impact employee innovation.

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APPENDICES

Appendix A – Questionnaire

General information

		Official use
Batch #	216076875 – QNM Msweli	A1
Industry:	Local Government	A2
Company name:	City of Umhlathuze & Mandeni Municipality	A3
Section name:		A4
Gender:	Male / Female	A5 0/1
Your role:	Core Business / Support services	A6 0/1
Your role:	Management / Non-management	A7 0/1
Age:		A8
Number of years with company:		A9
Years of formal schooling:	Less than 12 years	A10 1/2/3/4
	12 years (matric)	
	1st Degree / Diploma	
	Higher degree / Higher diploma	
Race:	Asian / Black / Coloured / White	A11 1/2/3/4

Post level

Indicate		Semantic Scale	Job evaluation system			
with	a X		Patter-son	Peromnes	Hay	Equate
						(Govern-
	1					ment)
		Top Management, Senior Management	F	1+ and	1 and 2	16
5			E	1++		14 and 15
				1, 2 and 3		
4		Professionally qualified, experienced	D	4, 5 and 6	3 and 4	11, 12
		specialists and Middle Management				and 13
3		Skilled technical and academically	С	7, 8, 9, 10,	5, 6, 6A, 7	7, 8, 9, 10
		qualified workers, junior Management,		11 and 12	and 8	and 11
		supervisors, foremen and				
		superintendents				
2		Semi-skilled and discretionary decision	В	13, 14, 15	9, 10 and	4, 5, 6
		making		and 16	11	and 7
1		Unskilled and defined decision making	A	17, 18 and	12 and 13	1, 2 and 3
				19		

PS: These conversions are only approximations

Transformational Leadership

	Strongly disagree	Disagree	Neutral	Agree	Strongly	agree
	1	2	3	4	5	
	Question – My leader					Answer
1	Has provided me with new ways of looking at things which used to be a puzzle for me.					
2	Is always seeking new opportunities for the unit/ department/organization.					
3	Has ideas that have forced me to rethink some of my own ideas that I have never questioned before.					
4	Paints an interesting pictu	re of the future for	our group.			
5	Shows us that he/she expe	cts a lot from us.				
6	Fosters collaboration among work groups.					
7	Acts without considering my feelings.					
8	Encourages employees to be "team players."					
9	Leads by "doing" rather than simply by "telling."					
10	Gets the group to work together for the same goal.					
11	Has a clear understanding of where we are going.					
12	Shows respect for my personal feelings.					
13	Has stimulated me to think about old problems in new ways					
14	Behaves in a manner that is thoughtful of my personal needs.					
15	Treats me without considering my personal feelings.					
16	Inspires others with his/her plans for the future.					
17	Insists on only the best performance.					
18	Is able to get others committed to his/her dream of the future.					
19	Provides a good model to follow.					
20	Develops a team attitude and spirit among his/her employees.					
21	Will not settle for second best.					
22	Leads by example.					

Work Self-efficacy

	Not well at all	Not well	Uncertain	Well	Very well	
	1 2		3	4	5	
	Question				Answer	
Thin	king of future work, how	well can you				
1	achieve goals that	will be assigned.				
2	respect schedules and work deadlines.					
3	learn new working methods.					
4	concentrate all energy on work.					
5	finish assigned work.					
6	collaborate with other colleagues.					
7	work with people of diverse experiences and ages.					
8	have good relationships with direct supervisors.					
9	behave in an effic	acious way with clies	nts.			
10	work in a team.					



Employee Innovation

	Never Almost Never Sometimes Fairly Often		Fairly Often	Very Often	Always	
	1 2 3 4 5		6			
	Question					
1	In your current job, how often do you look for opportunities to improve an existing process, technology, product, service or work relationship?					
2	In your current job, how often do you recognise opportunities to make a positive difference in your work, department, organization or with customers?					
3	In your current job, how often do you pay attention to non-routine issues in your work, department, organization or the market place?					
4	In your cur	rent job, how often	do you generate	ideas or solutions to	address problems?	?
5	In your current job, how often do you define problems more broadly in order to gain insight into them?					
6	In your current job, how often do you experiment with new ideas and solutions?					
7	In your current job, how often do you test-out ideas or solutions to address unmet needs?					ds?
8	In your current job, how often do you evaluate the strengths and weaknesses of new ideas?				leas?	
9	In your current job, how often do you try to persuade others of the importance of a new idea or solution?				N	
10	In your current job, how often do you push ideas forward so that they have a chance to become implemented?)	
11	In your current job, how often do you take the risk to support new ideas?					
12	In your current job, how often do you implement changes that seem to be beneficial?					
13	In your current job, how often do you work the bugs out of new approaches when applying them to an existing process, technology, product or service?			lying		
14	In your current job, how often do you incorporate new ideas for improving an existing process, technology, product or service into daily routines?			;		





S Mark Strasse Civic Centre Business Bistrict Private Bag X 1004 Richards Bay 3000 E. reg Parmilatheate gov 23 T. 035 907 5000 Fr 035 907 5444/5/6/7 Tell Fore No: 0000 222 027

www.smhlathuze.gov.za

Your ref:

Contact: V Singh

Our file ref:

DMS 1164495

In response to DMS No:

Date:

19 October 2016

ATTENTION: Mr QNM Msweli (Student No. 216076875)

Dear Sir

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Your e-mail dated 01 October 2016 that was sent to the Municipality requesting permission from Council to conduct your research has reference.

You are hereby granted permission to conduct your research within the City of uMhlathuze, however you would have to coordinate with the training section and other sections in Council with regards to the completion of the questionnaire.

It is recommended that you do not award the three shopping vouchers that you proposed to give to three employees for completing the questionnaire. If the questionnaires are numbered this shall possibly compromise the anonymity of the respondents.

If you require any further information please contact Mr Vikash Singh (035 907 5196).

I wish you all of the best with your research and await a bound copy of your dissertation upon completion of your studies.

Yours faithfully

M8 SS MASONDO

DEPUTY MUNICIPAL MANAGER: CORPORATE SERVICES

DMS 1164495





Tel 039 455 8900 Pax 102 455 9904 / 055 555 9741 Errali ceobmanden povis

2 Kingtahur Road, Mendan, Kwakulu Nasal, 9490 South Africa PO Box 144, Miterotot, 4490

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Programme Manager University of KwaZulu Natal School of Management, IT & Governance College of Law & Management Studies

Sir or Madam

RE: APPROVAL FOR A STUDENT TO CONDUCT A RESEARCH STUDY AT MANDENI MUNICIPALITY

Kindly be advised that Mr QNM Msweli (Student No: 216076875) who is a MCom-HRM student at your institution has been given permission to conduct a Research study in the area of Leadership and Organisational Behaviour in our organisation. All the necessary support will be made available for the study to be a success.

Yours sincerely,

MR LN MAPHOLOBA MUNICIPAL MANAGER

Appendix C – Turnitin report

ORIGIN.	0 _% 4 _% 5 _% 6 _%	
SIMILA	RITY INDEX INTERNET SOURCES PUBLICATIONS STUDENT	PAPERS
PRIMAR	Y SOURCES	
1	Submitted to University of South Africa Student Paper	3%
2	Azka Ghafoor. "Mediating role of creative self- efficacy", AFRICAN JOURNAL OF BUSINESS MANAGEMENT, 2011 Publication	<1%
3	Caillier, J. G "Linking Transformational Leadership to Self-Efficacy, Extra-Role Behaviors, and Turnover Intentions in Public Agencies: The Mediating Role of Goal Clarity", Administration & Society, 2014.	<1%
4	Puente-Díaz, Rogelio. "Creative Self-Efficacy: An Exploration of Its Antecedents, Consequences, and Applied Implications", The Journal of Psychology, 2015.	<1%
5	Hu, Bei, and Yidan Zhao. "Creative Self- efficacy Mediates the Relationship Between Knowledge Sharing and Employee Innovation",	<1%

Appendix D - Table of random numbers

164 Random Numbers 029 068 157 055 153 065 122 160 123 115 095 144 051 164 034 053 040 077 131 134 037 042 072 146 087 015 004 023 084 110 076 012 161 163 158 009 126 104 127 058 143 097 148 159 142 057 081 031 018 145 046 016 151 030 063 008 088 010 120 001 107 162 117 130 048 011 002 147 041 032 103 086 092 129 139 022 089 094 124 155 138 067 075 136 118 085 021 049 061 014 156 149 036 047 056 109 133 083 026 033 098 024 039 082 017 060 019 140 062 132 050 005 100 054 035 093 113 101 137 027 074 141 102 043 119 125 064 006 044 099 108 135 078 150 090 069 111 028 114 105 003 070 152 071 106 112 025 079 154 020 007 013 116 096 091 128 121 080 045 073 052 038 066 059

Specs: This table of 164 random numbers was produced according to the following specifications: Numbers were randomly selected from within the range of 1 to 164. Duplicate numbers were not allowed. This table was generated on 3/27/2017.

Appendix E - Participant information sheet

Information Sheet and Consent to Participate in Research

Date: 12 January 2017

Greetings,

My name is <u>Qinisani 'Ndaba' Msweli</u> a Master of Commerce-Human Resource Management student from the University of KwaZulu Natal's School of Management, IT and Governance (Tel: 031 260 7013, Room M1-119, 1st Floor, M Block, Westville Campus).

You are being invited to consider participating in a study that involves research (Impact of transformational leadership mediated by work self-efficacy on employee innovation in the South African local government sector). The aim and purpose of this research is to enable the local government leadership to know which predictor variable between transformational leadership and work self-efficacy to primarily focus on in order to enhance innovation. The study is expected to include 300 participants from 3 sites with each site providing 100 participants. It will involve the following procedures:

- HR will inform the site population about the survey,
- Researcher will deliver the surveys to each site,
- Interested participants will collect a survey from HR, complete then return it,
- Researcher will collect all the completed surveys for analysis.

The duration of your participation if you choose to participate and remain in the study is expected to be less than 10-minutes even for the slowest of readers.

The study should not involve any risks and/or discomforts to the participants. The study will provide no direct benefits to participants but instead assist the leadership in the organisation to understand the predictor variable to focus on in order to enhance employee innovation. The study will also contribute to the body of knowledge by furnishing a better insight with regards to the impact of transformational leadership on employee's innovation.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: HSS/2003/016M).

In the event of any problems or concerns/questions you may contact the researcher at (provide contact details) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus Govan Mbeki Building

Private Bag X 54001 Durban 4000 KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at any time with no negative consequence. There will be no monetary gain from participating in the study. Your anonymity will be maintained by the researcher and the School of Management, I.T. & Governance and your responses will not be used for any purposes outside of this study.

All data, both electronic and hard copy, will be securely stored during the study and archived for 5 years. After this time, all data will be destroyed.

If you have any questions or concerns about participating in the study, please contact me on (079 590 7796) or my research supervisor Dr Abdulla Kader on (082 901 0225).

Sincerely

1

	CONSENT TO PARTICIPATE
I	have been informed about the study entitled (Impact mediated by work self-efficacy on employee innovation in the South r) by (Qinisani Msweli).
I understand the purpose and	rocedures of the study.
I have been given an opport satisfaction.	mity to ask questions about the study and have had answers to my
	in this study is entirely voluntary and that I may withdraw at any time enefits that I usually am entitled to.
If I have any further question contact the researcher at (07)	ns/concerns or queries related to the study I understand that I may 590 7796).
	erns about my rights as a study participant, or if I am concerned about esearchers then I may contact:
HUMANITIES & SOCIAL SCIENC Research Office, Westville Ca Govan Mbeki Building Private Bag X 54001 Durban 4000 KwaZulu-Natal, SOUTH AFRICA Tel: 27 31 2604557 - Fax: 27 3 Email: HSSREC@ukzn.ac.za	
Signature of Participant	Date
Signature of Witness (Where applicable)	Date
Signature of Translator (Where applicable)	Date

PO Box 10828

03 October 2016

EMPANGENI 3880

Deputy Municipal Manager - Corporate Services

Att: Ms SS Masondo

City of Umhlathuze

y or ommaning

5 Mark Strasse Richards Bay

3900

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE CITY OF UMHLATHUZE: LEADERSHIP STYLE, PERCEIVED ORGANISATIONAL SUPPORT AND POSITIVE ORGANISATIONAL BEHAVIOUR.

Dear Madam,

 Ndaba Mswell am doing research at the University of KwaZulu-Natal towards a Master of Commerce Degree in Human Resource Management. I am seeking your permission to allow employees of the City of Umhlathuze to participate in a study entitled: Leadership style, perceived organisational support and positive organisational behaviour. The aim of the study is to assess the link between specific prevalent leadership style (transformational leadership), as well as the perceived organisational support of employees (self-efficacy), positive organisational behaviour (innovative behaviour). By determining how leadership contribute to and positive organisational behaviour, recommendations will be made to guide managers towards creation of an ethical work environment, to the benefit of not only the organisation, but all employees and the community at large.

Your organisation has been selected primarily because of the goodwill the City of Umhlathuze may have towards me as their resident.

The study will entail that 150 or more employees complete a questionnaire with the constructs mentioned above. A simple random sampling technique will be employed to remain with a final sample of 100 completed questionnaires that will form part of the analysis. As stated earlier the aim is to identify those management practices which facilitate desirable employee

behaviours. Administering the questionnaire should not take more than 60 minutes, for the slowest of readers.

Data collected will only be used for academic purposes, including but not limited to this dissertation. The content of the research material is also of such a nature that it is almost impossible to harm the organisation or potential participants. An ethical clearance for this project will be obtained from the Research Ethics Committee at the University of KwaZulu-Natal.

The feedback from the findings will be made available to you once the study is complete.

ours faithfully,



Vdaba Msweli

R & Stakeholder Relations Manager – UVS MCom-HRM student)

Appendix G – Ethical clearance approval



08 December 2016

Mr Qinisani Ndabezinhle Mpumelelo Msweli (216076875) School of Management, IT & Governance Westville Campus

Dear Mr Mswell,

Protocol reference number: HSS/2003/016M

Project title: Impact of Transformational Leadership mediated by self-efficacy on employee innovation in the South African local government sector

Full Approval - Expedited Application

In response to your application received on 15 November 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Abdulla Kader

Cc Academic Leader Research: Professor Brian McArthur

Cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee Dr Shenuka Singh (Chair) Westville Campus, Govan Mbeki Bullding

Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 01 000 0507/5039M657 Facsimile: +27 (0) 31 250 4809 Email: ximbap@uksn.ac.za / snymanm@uksn.ac.za / moh.unp@uksn.ac.za

Website: www.ukm.po.pg