Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust

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COMMENTS

The reader is reminded of the following:

- The editorial style in the first and last chapters of this mini-dissertation follows the format prescribed by the Programme in Industrial Psychology of the North-West University (Vaal Triangle Campus).

- The references and page numbers in this mini-dissertation follow the format prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University (Vaal Triangle Campus) to use APA style in all scientific documents.

- This mini-dissertation is submitted in the form of a research article. The editorial style specified by the South African Journal of Industrial Psychology is used in the second chapter.
DECLARATION

I, Lynelle Coxen, hereby declare that “Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust” is my own work and that the views and opinions expressed in this mini-dissertation are my own and those of the authors as referenced both in the text and in the reference lists.

I further declare that this work will not be submitted to any other academic institution for qualification purposes.

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NOVEMBER 2015
DECLARATION OF LANGUAGE EDITING

I hereby declare that I was responsible for the language editing of the mini-dissertation: Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust submitted by Lynelle Coxen.

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9 November 2015
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ABSTRACT

Title: Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust.

Key terms: Authentic leadership, organisational citizenship behaviour, workplace trust, indirect effects, public health care sector, public health care employees, Sedibeng.

Research on leadership is of particular importance in the South African public health care sector as the Department of Health perceives leadership as a critical component required to address the challenges that this sector is currently being faced with. In addition, the demanding work environment, perceptions of quality health care, and other challenges that the public health care sector are currently facing might lead to a reduction of individuals utilising these services. Similar to the vital role that leadership plays in addressing these challenges, going the “extra mile” can also aid in the improvement of one of the Department of Health’s key performance areas, namely improving “health system effectiveness”. Leadership may directly influence the extent to which employees are prepared to engage in extra-role behaviours, known as organisational citizenship behaviour, but it may also influence this behaviour through workplace trust. As trust in leadership is at an all-time low, it is important to investigate the role of workplace trust in its three referents (organisation, supervisor, and co-workers) and whether this might be what is needed to encourage employees to engage in extra-role behaviours.

The main objective of this study was to determine whether employees’ perceptions of their leaders being authentic influences workplace trust as well as organisational citizenship behaviour. Additional objectives were to determine whether workplace trust indirectly affects the relationship between authentic leadership and organisational citizenship behaviour; also to determine if there is a difference in the strength of these indirect effects in terms of trust in its three different referents. A final objective was to make recommendations for future research and practice.

In this study, a quantitative survey design was utilised, and the research was cross-sectional in nature. An exploratory as well as descriptive approach was used. The Authentic
Leadership Inventory (ALI), Workplace Trust Survey (WTS), and Organisational Citizenship Behaviour Scale (OCBS) were used to collect data. A biographical questionnaire was also utilised to collect demographic information about the participants. The sample consisted of 633 employees in the public health care sector. The data was analysed by means of a two-step model generating approach of structural equation modelling (SEM).

The results indicate that authentic leadership is a significant predictor of workplace trust in its three referents. However, only trust in the organisation and trust in co-workers were significant predictors of organisational citizenship behaviour. Authentic leadership and trust in the immediate supervisor did not play a significant role in influencing employees’ levels of organisational citizenship behaviour. As a result, only trust in the organisation and trust in the co-worker had a significant indirect influence on the relationship between authentic leadership and organisational citizenship behaviour. Trust in the organisation, however, had the strongest effect on this relationship. The findings highlight the importance of authentic leadership and trust in the organisation as well as trust in co-workers as contributors to organisational citizenship behaviour.
CHAPTER 1

INTRODUCTION

This mini-dissertation explores the relationship between authentic leadership, organisational citizenship behaviour and workplace trust in the public health care sector. The specific focus is to determine whether authentic leadership influences organisational citizenship behaviour directly or indirectly through workplace trust.

The aim of this chapter is to present the problem statement as well as the general and specific research objectives. The research design and method are explained, followed by an overview of the chapters.

1.1 Problem Statement

Many South Africans do not have access to health care services, yet individuals who do have access are not fully utilising the public health care services that are available (Benatar, 2013; Gilson & McIntyre, 2007). The underutilisation of these services may be due to the fact that individuals have a negative perception regarding the quality of these services (Gilson & McIntyre, 2007). As a result, one of the priorities in the Government’s Midterm Review involved the objective to increase the number of health care users who are satisfied with public services from 54% in 2009 to 70% in 2014 (Department of Performance Monitoring and Evaluation [DPME], 2012).

The goal of improving service delivery in this sector is complicated by a number of challenges facing the sector itself as well as its employees (Barnard & Simbhoo, 2014; DPME, 2012). One of these challenges is a lack of qualified health care professionals which may impact on both the employees and the organisation (Health Systems Trust, 2013). George, Atujuna, and Gow (2013) further mention that other challenges include work overload, an uncertain work environment and limited training opportunities which can place pressure on the rest of the public health care workforce. The lack of and distrust in leadership and increased workforce diversity are also considered to be challenges (Barnard & Simbhoo, 2014). These challenges can contribute to the service delivery difficulties and subsequent negative perception from the users of these services that the public health care sector is
currently being faced with. Working within the South African public health care sector may be demanding and the employees will need to exert extra effort to achieve the goal of improving services rendered (Mathumbu & Dodd, 2013; Park, Yun, & Han, 2009). This tendency to go the “extra mile” is known as organisational citizenship behaviour.

Organisational citizenship behaviour is a theoretical concept which measures different styles of discretionary employee behaviour (Beal III, Stavros, & Cole, 2013; Bester, Stander, & Van Zyl, 2015). Organisational citizenship behaviour can be described as discretionary work behaviour that is not directly related to the requirements of the job and is consequently not formally recognised by the reward system in organisations (Ariani, 2013; Beal III et al., 2013; Mathumbu & Dodd, 2013; Organ, 1997; Tanaka, 2013). Mathumbu and Dodd (2013) referred to organisational citizenship behaviour as the employees’ willingness to go beyond what is formally expected of them in their work. In this study, organisational citizenship behaviour will be defined as the purposeful and unrestricted behaviour of employees which improves an organisation’s functioning and effectiveness (Diedericks, 2012; Organ, 1997). Organisational citizenship behaviour can also be conceptualised as comprising two dimensions. These dimensions include an interpersonal orientation involving the employees’ willingness to assist a co-worker, as well as an organisational orientation involving the employees’ willingness to exert more effort towards assisting the organisation (Diedericks, 2012; Organ & Paine, 1999; Rothmann, 2010).

Al-Sharafi and Rajiani (2013) found that organisational citizenship behaviours have positive effects on many aspects of the organisation. These positive effects may include high levels of organisational effectiveness and efficiency resulting from high productivity, job performance and customer satisfaction (Al-Sharafi & Rajiani, 2013; Ariani, 2013). Al-Sharafi and Rajiani (2013) further found that organisational citizenship behaviour is one of the biggest contributing factors towards organisational effectiveness. The importance of organisational citizenship behaviours can thus not be underestimated as they underpin organisational effectiveness, which again positively influences customer satisfaction and organisational performance (Chien, 2003). Customer satisfaction and organisational performance are important in the public health care sector as the reputation of public hospitals can be improved merely by health care employees’ willingness to go beyond what is formally expected of them (Mathumbu & Dodd, 2013). Ariani (2013) and Tanaka (2013) mentioned that it is also good practice for employees to take the initiative to engage in work activities
that do not form part of their daily work tasks as unforeseen events can occur. The occurrence of unexpected events is especially prevalent in hospitals as hospital staff is continually faced with life-threatening emergencies that require immediate action. The question that should then be answered is “how can organisations enhance their employees’ organisational citizenship behaviour”?

Leadership effectiveness may be one of the avenues to increase employees’ willingness to engage in extra-role behaviours. The Department of Health (2011) has drawn up a 10-point plan on how to improve the quality of health care services in South Africa. One of the dimensions of this plan focuses on leadership. Gilson and Daire (2011) emphasised the role of leadership in improving public health systems and transforming organisational structures. Al-Sharafi and Rajiani (2013) found that different leadership practices are significant predictors of organisational citizenship behaviour. The rationale behind the findings is that leaders are considered to be the main influencers of their subordinates’ behaviour (Al-Sharafi & Rajiani, 2013; Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Tapara, 2011) and are likely to play a vital role in employees’ organisational citizenship and discretionary behaviours (Al-Sharafi & Rajiani, 2013). However, the focus should not only be on leadership in general, but also on authentic leadership as there is a current need for more ethical and positive forms of leadership and the necessity for creating a trusting work environment (Engelbrecht, Heine, & Mahembe, 2014; Zbierowski & Góra, 2014).

Authentic leadership has been the topic of interest in recent years, both in industry and the academic environment (Avolio et al., 2004; Hsieh & Wang, 2015; Men & Stacks, 2014; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). According to Luthans and Avolio (2003), authentic leadership stems from positive psychology as well as a strongly developed organisational setting in which positive self-development is fostered. The focus in this regard is on self-awareness and self-controlled positive behaviour (Luthans & Avolio, 2003). Zbierowski and Góra (2014) added to this, by placing positive leadership – with authenticity as one characteristic of positive leadership – on the organisational level, resulting in positive organisations influencing positive employee and organisational behaviour.
Authentic leadership is regarded as a higher-order construct where leadership is seen as drawing on “positive psychological capacities and positive ethical climate to foster the four core dimensions of authentic leadership, enabling positive follower self-development” (Walumbwa et al., 2008, p. 94). For the purpose of this study, authentic leadership is conceptualised according to its four dimensions which include self-awareness, balanced processing, internalised moral perspective, and relational transparency (Avolio & Gardner, 2005; Men & Stacks, 2014; Neider & Schriesheim, 2011; Penger & Cěrne, 2014; Walumbwa et al., 2008). Self-awareness refers to the leaders’ ability to be self-introspective and to possess knowledge regarding their strengths, developmental areas, values, beliefs, and personality (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Penger & Cěrne, 2014). Balanced processing refers to the objective evaluation and consideration of others’ ideas in order to come to a fair conclusion when making decisions (Avolio & Gardner, 2005; Walumbwa et al., 2008). An internalised moral perspective can be described as an internalisation of moral standards and values which guide decision-making, irrespective of external pressures (Gardner et al., 2005; Men & Stacks, 2014). Relational transparency, on the other hand, focuses on being genuine and authentic in terms of sharing information and expressing thoughts and feelings openly (Men & Stacks, 2014; Walumbwa et al., 2008). For the purpose of this study, authentic leadership was measured according to the degree to which employees perceive their leaders to be authentic.

One of the goals of authentically leading employees is to allow these employees to gain trust in their managers, ultimately resulting in positive outcomes (Hassan & Ahmed, 2011; Heyns & Rothmann, 2015). Several studies have found that these positive outcomes can include commitment, job satisfaction, and work engagement (Avolio et al., 2004; Engelbrecht et al., 2014; Hsieh & Wang, 2015). In addition to these studies, other studies have found that authentic leadership can positively influence employees’ attitudes and behaviour such as trust and organisational citizenship behaviour (Avolio et al., 2004; Hsieh & Wang, 2015; Walumbwa et al., 2008). It was also found that nurses’ perceptions of authentic leaders resulted in a greater degree of trust in management (Laschinger, Wong, & Grau, 2013).

Due to the fact that health care systems are relational in nature, relationship problems are apparent (Gilson, 2003). Increasing trust levels can be regarded as important in order to improve relationships and to facilitate positive outcomes. Ferres (2003) defined workplace trust as “an individual’s willingness to act on the basis of his/her perception of a trust referent
(organisation/supervisor/manager/peer) being supportive/caring, ethical, competent and cognisant of others’ performance” (p. 8). For the purposes of this study, workplace trust will be referred to as only trust. The conceptualisation of trust in this study focused on trust in terms of three referents: organisation, supervisor, and co-worker. Trust in the organisation relates to the leader’s ability to create a climate of ethicality and positive behaviour, characterised by open communication, fairness and organisational support (Ferres, 2003; Onorato & Zhu, 2014); the manager and/or supervisor are/is seen as representative of the organisation (O’Reilly, Caldwell, Chatman, Lapiz, & Self, 2010). Trust in the supervisor results from the leader’s – as a representative of the organisation - consistency in words and actions (Hsieh & Wang, 2015). Supervisor trust is elicited when supervisors listen to the ideas of subordinates (Ferres & Travaglione, 2003). Lastly, trust in the co-worker focuses on the leaders’ ability to facilitate authenticity in their subordinates (Avolio et al., 2004). Co-worker trust is created when employees support one another and through their authentic interactions (Ferres, 2003).

The Social Exchange Theory (Blau, 1964) denoted that leadership and trust constitute a social exchange between the leader and subordinates (Hassan & Ahmed, 2011). Trust in authentic leaders transpires from consistency between what the leader is saying and the subsequent action taken as well as the leader’s moral awareness (Wang & Hsieh, 2013). Furthermore, the level of trust of employees and their willingness to engage in organisational citizenship behaviours can also be regarded as a social exchange. The focus is on reciprocity (Cropanzano & Mitchell, 2005) translating into the willingness of employees to return their efforts when they are treated fairly and with concern by their supervisors (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). The return of their efforts in this study refers to organisational citizenship behaviour. Thus, researchers concentrating on the social exchange approach emphasise reciprocity (Cropanzano & Mitchell, 2005). These researchers have found that leaders’ ability to treat subordinates fairly results in subordinates’ willingness to reciprocate (Mayer et al., 2009). Hsieh and Wang (2015) denoted that trust in the supervisor contributes to organisational citizenship behaviour.

However, trust in the supervisor can only be gained once the employee’s perception of the supervisor is consistent with the actions of authentic leadership (Hsieh & Wang, 2015). Additionally, a study done by Stewart Wherry (2012) found a relationship between authentic leadership and organisational citizenship behaviour. Thus, authentic leadership may have a
direct impact on organisational citizenship behaviour as well as an indirect impact via trust. Hsieh and Wang (2015) also suggested that trust plays a mediating role when it is linked to authentic leadership. However, they did not test trust in the three referents as separate mediators, which was done in the current study. The focus of trust in its three referents is important as trust may play a role in individual as well as organisational effectiveness (Goodwin, Whittington, Murray, & Nichols, 2011). Laschinger et al. (2013) have also found that few studies exist where authentic leadership has been empirically linked to work attitudes and outcomes. They have also found that there are a limited number of studies researching authentic leadership in a health care environment (Laschinger et al., 2013).

The second theoretical framework that guided this study is the Job Demands-Resources (JD-R) model (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). This model classifies job characteristics and its factors into job demands and job resources which can both result in certain behavioural outcomes (Van Den Broeck, Van Ruysseveldt, Vanbelle, & De Witte, 2013). For the purpose of this study, authentic leadership was regarded as a job resource, whereas organisational citizenship behaviour was seen as a behavioural outcome. Although the JD-R model focuses on both energetic and motivational processes (Van Den Broeck et al., 2013), the influence that authentic leadership has on the levels of trust is better aligned to the motivational process. As a result, authentic leadership was hypothesised to influence organisational citizenship behaviour indirectly through trust in three referents which was the main aim of this study.
The hypothesised model is illustrated in the figure below:

![Diagram](image)

*Figure 1. A hypothesised model of authentic leadership and organisational citizenship behaviour with the indirect effects of workplace trust*

### 1.2 Research Questions

In order to address the above mentioned problem, the following research questions were formulated:

- How are the relationships between authentic leadership, trust in the organisation, immediate supervisor and co-workers, and organisational citizenship behaviour conceptualised in literature?
- Does authentic leadership have an influence on trust in the organisation, immediate supervisor and co-workers, and organisational citizenship behaviour amongst employees in the public health care sector?
- Does trust in the organisation, immediate supervisor and co-workers indirectly affect the relationship between authentic leadership and organisational citizenship behaviour?
• Is there a difference in the indirect effects of the workplace trust referents on the relationship between authentic leadership and organisational citizenship behaviour?
• What recommendations can be made for future research and practice?

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to investigate the influence of perceived authentic leadership on workplace trust and organisational citizenship behaviour.

1.3.2 Specific Objectives

The specific objectives of the study were to:

• investigate the relationship between authentic leadership, trust in the organisation, immediate supervisor and co-workers, and organisational citizenship behaviour as conceptualised in literature;
• determine whether authentic leadership has an influence on trust in the organisation, immediate supervisor and co-workers, and organisational citizenship behaviour amongst employees in the public health care sector;
• investigate whether trust in the organisation, immediate supervisor and co-workers indirectly affects the relationship between authentic leadership and organisational citizenship behaviour;
• determine if there is a difference in the indirect effects of the workplace trust referents on the relationship between authentic leadership and organisational citizenship behaviour; and
• make recommendations for future research and practice.
1.4 Research Design

1.4.1 Research Approach

A quantitative survey design was utilised in the study. De Vos, Strydom, Fouché, and Delport (2011) described quantitative research as the measurement of variables with the focus on controlling, predicting and explaining certain phenomena. A cross-sectional research approach was used. De Vos et al. (2011) and Maree (2011) mentioned that a cross-sectional approach is used when participants complete the questionnaires only once, where the goal is to describe population differences at that specific moment. The study was further descriptive as well as exploratory in nature. Although some of the hypotheses were supported by theory, the indirect effects of trust on all three referents have not empirically been tested with authentic leadership as the predictor variable and organisational citizenship behaviour as the criterion variable. For the purposes of the study, primary data analysis was conducted.

1.4.2 Research Method

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

1.4.2.1 Literature Review

In the first phase, a complete literature review regarding authentic leadership, workplace trust, and organisational citizenship behaviour were conducted in order to investigate whether relationships between the variables exist. Articles relevant to the study that have been published between 1960 and 2015 were consulted after databases such as EbscoHost (Business Source Premier; Academic Search Premier; PsycArticles; PsycInfo), Science Direct, SAePublications, Emerald, Nexus, SACat, and ProQuest have been accessed. The major journals that were consulted due to their prevalence to the topic include: South African Journal of Industrial Psychology, South African Journal of Human Resource Management, International Journal of Business and Management, International Journal of Business Administration, International Journal of Human Resource Management, Journal of Managerial Psychology, The Leadership Quarterly, Journal of Leadership and Organizational Studies, International Journal of Health Services, International Journal of
1.4.3 Research Participants

The focus of the study was on employees in the public health care sector in the Sedibeng region, that includes public hospitals and clinics in Vereeniging, Vanderbijlpark, Heidelberg and Sebokeng. The researcher aimed for a sample size of approximately 500 public health care employees, estimating a response rate of 25% from the approximate 2 000 health care employees in the Sedibeng district. The final sample size consisted of 633 employees in the public health care sector. According to Byrne (2012) and Kline (2011), a sample size of more than 200 is preferable when using structural equation modelling (SEM) as a statistical technique. Convenience sampling as a non-probability sampling technique was employed. In this regard; the employees who were easily accessible were asked to complete the questionnaires. After that a representative at each hospital/clinic was asked to distribute the questionnaires to other employees until a representative sample of the population had been reached. In order for participants to complete the questionnaires, English literacy was a requirement.

1.4.4 Measuring Instruments

A biographical questionnaire, the Authentic Leadership Inventory (ALI), the Workplace Trust Survey (WTS), and the Organisational Citizenship Behaviour Scale (OCBS) were utilised in the study.

*Biographical questionnaire*: A biographical questionnaire was used to determine the demographic characteristics of the participants, including their age, gender, home language, race, and educational qualifications. Other aspects that were determined include the participants’ length of employment in the organisation as well as the length of employment in their current position.


**Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011)** was used to determine whether the employees perceive their leaders as being authentic. The ALI is based on the same dimensions as the Authentic Leadership Questionnaire (ALQ; Walumbwa et al., 2008), but the items developed for the ALI differ from the ALQ’s items. The ALI was developed as Neider and Schriesheim (2011) were concerned about the ALQ’s subjective content analysis as well as the “garbage parameters” used to improve model fit. Another concern is that the ALQ is not available for commercial use, making its use for future research challenging (Neider & Schriesheim, 2011). As a result, it was decided to utilise the ALI for the purposes of this study. The employees’ perceptions were measured on the basis of the four dimensions of self-awareness, balanced processing, internalised moral perspective, and relational transparency. The ALI consists of 14 items, each with a five-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Example items include “My leader openly shares information with others” and “My leader objectively analyses relevant data before making a decision”. Men and Stacks (2014), as well as Neider and Schriesheim (2011), reported Cronbach’s alpha coefficients ranging between 0.74 and 0.90, indicating acceptable reliability.

**Workplace Trust Survey (WTS; Ferres, 2003)** was used to measure trust in the organisation (11 items), trust in the immediate supervisor (9 items), as well as co-worker trust (12 items). The WTS consists of 32 items, each with a four-point Likert-type scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Example items include “I think that processes within my organisation are fair” (organisation); “I think that my supervisor appreciates additional efforts that I make” (supervisor); and “I feel that I can trust my co-workers to do their jobs well” (co-workers). The internal consistency of the items yielded the following Cronbach’s alpha coefficients: $\alpha = 0.95$ (organisation); $\alpha = 0.96$ (immediate supervisor); and $\alpha = 0.93$ (co-workers) (Ferres & Travaglione, 2003). These internal reliabilities indicated that the WTS displayed acceptable reliability (Nunnally & Bernstein, 1994).

**Organisational Citizenship Behaviour Scale (OCBS; Rothmann, 2010)** was used to measure the employees’ willingness to go beyond what is formally expected of them in the workplace. This willingness was measured in terms of the employees’ willingness to assist both co-workers as well as the organisation. The OCBS consists of six items; three relating to the assistance to co-workers dimension and three relating to the assistance to the organisation dimension. Response options are arranged on a six-point Likert-type scale which ranges from
1 (strongly disagree) to 6 (strongly agree). Example items include “I attend functions that are not required but that help the organisational image” (organisational assistance) and “I go out of my way to make newer employees feel welcome in the work group” (co-worker assistance). According to Diedericks (2012), the Cronbach’s alpha coefficients showed acceptable reliabilities, with assistance to co-workers ($\alpha = 0.78$) and assistance to the organisation ($\alpha = 0.80$).

### 1.4.5 Research Procedure

For the purposes of the study, the primary data of the project was used as this study aimed to achieve one of the objectives of the project. The primary researchers obtained permission from a representative of the Department of Health in the Sedibeng district. In terms of the questionnaires a letter of consent, as well as an information letter, was attached. The information letter contained the objectives of the study and explained the voluntary nature of participation. Once the questionnaires had been distributed, the participants were required to complete the questionnaires at a place of their choice. The questionnaires took approximately 60 minutes to complete. The participants were then required to submit the completed questionnaires in a secured box at each facility. A representative or gatekeeper at each medical facility identified other suitable candidates to participate in the study. The collection of data took approximately two months.

### 1.4.6 Statistical Analysis

For the purposes of this study, Mplus 7.31 (Muthén & Muthén, 1998-2012) and SPSS 22 (IBM Corporation, 2013) were used to analyse the data.

A two-step model generating approach of structural equation modelling (SEM) was used. Kline (2011) referred to this two-step model as latent variable modelling. In order to determine the measurement model’s factorial validity, confirmatory factor analysis (CFA) was performed. The structural model was also evaluated where the regression relationships (structural paths) relating to the hypotheses have been inserted. The best-fitting measurement model was used as a basis for the structural model. Measurement and structural models were tested with a Maximum Likelihood Robust estimator (MLR), where skewness and kurtosis were taken into account (Byrne, 2012). Byrne (2012) further mentioned that it is important to
then evaluate the model to determine how well it fits the data through the validation of the model’s parameter estimates.

The indices that were used to assess the models’ fit to the data included the chi-square ($\chi^2$), degrees of freedom ($df$), goodness-of-fit index (GFI), root mean square error of approximation (RMSEA), and incremental fit indices. The incremental fit indices included the Tucker-Lewis Index (TLI) as well as the Comparative Fit Index (CFI) which is the index of choice, according to Byrne (2012). The CFI, TLI as well as the GFI should yield values above 0.95 in order to be acceptable (Hu & Bentler, 1999). The RMSEA values should be smaller than 0.08 in order to indicate acceptable fit (Byrne, 2012; Hair, Black, Babin, & Andersen, 2010). The Akaike Information Criterion (AIC), as well as the Bayes Information Criterion (BIC), was utilised to make a comparison between the measurement models. The AIC and BIC values should be small; thus, the lower the value, the better the model fits the data (Hair et al., 2010).

In order to determine the reliability of the measuring instruments, composite reliability coefficients ($\rho$) were used as suggested by Raykov (2009). Wang and Wang (2012) maintained that a reliability coefficient of 0.70 and higher is acceptable and was used as a cut-off point for reliability. The potential indirect effects were also tested. In order to determine whether any relationships in the hypothesised model were affected by workplace trust, bootstrapping was used to construct bias-corrected 95% confidence intervals (CIs) to evaluate indirect effects as explained by Mokgele and Rothmann (2014). Lower and upper CIs were reported to indicate whether they include zero. If zero is not included in CIs, it means that trust is a mediator. The kappa-squared ($K^2$), a measure of effect sizes, was used to test the practical significance of the indirect effects. Preacher and Kelley (2011) described the kappa-squared as the ratio of the indirect effect to its maximum possible size considering the variances. Kappa-squared values can be interpreted similar to Cohen’s $R^2$ values, in which 0.01, 0.09, and 0.25 are small, medium, and large effects, respectively (Preacher & Kelley, 2011).

Mediation analysis, more specifically indirect effects as opposed to the causal steps approach of Baron and Kenny (1986), was used. The reasons behind the statistical method include the following: Hayes (2012) mentioned that the Baron and Kenny (1986) method does not measure or make inferences about possible indirect effects. Secondly, in order to claim that
trust is a mediator, three null hypotheses should be successfully rejected (Hayes, 2012). Thirdly, the causal steps approach commences by testing whether a predictor affects a mediator, and whether a mediator affects a criterion (Hayes, 2012). If the null hypothesis is not rejected, the causal steps procedure ends as the criteria of establishing a mediator becomes irrelevant (Hayes, 2012). Lastly, Hayes (2012) mentions that indirect effects in the causal steps approach are not mediated if there is not full or partial mediation present.

1.5 Ethical Considerations

In order to ensure that the research was conducted in a fair and ethical manner, the purpose of the study as well as the voluntary nature thereof was explained to the research participants. Written informed consent was obtained and anonymity, as well as confidentiality, was ensured. The primary researchers refrained from causing harm to the participants. The research proposal was submitted to the Ethics Committee of the North-West University for review, obtaining permission to make use of the primary data of the project. The original ethics application for the project, through which primary data was collected, had been approved (NWU-HS-2014-0146).

1.6 Contributions of the Study

The contributions of this study for the individual, the organisation (hospitals) as well as for Industrial-Organisational Psychology literature were as follows:

1.6.1 Contribution for the Individual

Ineffective leadership practices and poor relationships with co-workers and supervisors place a great amount of pressure on employees. In determining whether authentic leadership contributes to all trust referents and subsequently organisational citizenship behaviour, awareness can be created whereby employees can understand what impact their perceptions of leadership and their degree of workplace trust can have on their willingness to engage in extra-role behaviours.
1.6.2 Contribution for the Organisation

Public health care institutions are faced with the challenge of improving their reputations due to the negative perceptions of users of public health care services. Al-Sharafi and Rajiani (2013) found that higher organisational citizenship behaviour leads to higher job performance, customer satisfaction and productivity. As a result, public health care institutions’ credibility and reputations can be restored if the impact of authentic leadership and the resulting organisational citizenship behaviours is understood. Additionally, if the impact of authentic leadership and trust is understood, these institutions can create awareness campaigns as well as evidence-based interventions to facilitate these attitudes and behaviours. In understanding how the referents of trust are influenced by employees’ perceptions of their leaders’ authenticity, and how these referents of trust can impact organisational citizenship behaviours, public health care institutions can develop and prioritise interventions to enhance leader authenticity and trust.

1.6.3 Contribution for Industrial-Organisational Psychology Literature

There has been limited empirical research on the relationship between authentic leadership and follower attitudes and behaviours (Hassan et al., 2013; Pues, Wesche, Streicher, Braun, & Frey, 2012), specifically in the South African health care industry (Stander, De Beer, & Stander, 2015). Consequently, this study contributed to this limited amount of research. Additionally, the relationship between authentic leadership and organisational citizenship behaviour with trusts’ three referents has not been empirically tested before. Laschinger et al. (2013) mention that studies in the health care system are mostly related to the nursing field and that there are a limited number of studies linking authentic leadership to the health care environment. Lastly, the proposed variables have not been empirically tested in the current sample. The indirect effects of trust in its three referents are also a new contribution to literature as most studies focusing on trust only include one or two referents or focuses on trust in general (e.g. Clapp-Smith, Vogelsang, & Avey, 2009; Hassan & Ahmed, 2011; Pues et al., 2012; Stander et al., 2015; Wong & Cummings, 2009).
1.7 Chapter Division

The chapters in this mini-dissertation are outlined as follows:

Chapter 1: Introduction
Chapter 2: Research article
Chapter 3: Conclusion, limitations and recommendations
References


CHAPTER 2

RESEARCH ARTICLE
Employees in the public health care industry are currently facing a demanding work environment which includes a lack of trust in leadership. The aim of this study was to investigate the influence of authentic leadership on organisational citizenship behaviour, through workplace trust. A cross-sectional survey design was used with employees in public health care institutions in South Africa ($N = 633$). The Authentic Leadership Inventory, Workplace Trust Survey, and Organisational Citizenship Behaviour Scale were administered to these participants. The data was analysed using a two-step model generating approach of structural equation modelling. The results indicated that authentic leadership has a significant influence on trust in all three referents, namely the organisation, the supervisor and co-workers. Both trust in the organisation and trust in co-workers positively influenced organisational citizenship behaviour. Conversely, authentic leadership did not have a significant influence on organisational citizenship behaviour. Finally, authentic leadership had a significant indirect effect on organisational citizenship behaviour through trust in the organisation and trust in co-workers; there were differences in the strength of the indirect effect of these trust referents. Trust in the organisation was found to have the strongest indirect effect on the relationship between authentic leadership and organisational citizenship behaviour.

Keywords: Authentic leadership, organisational citizenship behaviour, workplace trust, indirect effects, public health care sector, public health care employees, Sedibeng.
INTRODUCTION

The National Development Plan’s (NDP) goals are to strengthen the South African health system by optimising human capital, improving quality care, and enhancing effective leadership (National Planning Commission [NPC], 2011). The achievement of these goals can address some of the external and internal challenges that the public health care sector is currently facing. The external challenges include service delivery inefficiencies and language barriers between public health care employees and users which may result in customer dissatisfaction (Health Systems Trust, 2013; Okanga & Drotskie, 2015). According to Dash and Pradhan (2014), customer perceptions and satisfaction may be improved if public health care employees go the “extra mile” in their work.

Internally, the public health care sector is challenged by poor management structures, a lack of trust in leadership, as well as a turnover and migration of public health care employees (Benatar, 2013; George, Atujuna, & Gow, 2013; Health Systems Trust, 2013; Mayosi et al., 2012). The Department of Health (DoH, 2011) has subsequently included leadership as one of its pillars in the improvement of quality health care services. Authentic leadership may be of particular importance in this organisation. It can be regarded as a positive form of leadership (Avolio & Gardner, 2005; Beddoes-Jones & Swailes, 2015; Harter, 2002) that contributes to positive organisations which have a positive impact on employee and organisational behaviours (Zbierowski & Góra, 2014). Despite the importance of this form of leadership, limited studies on authentic leadership have been conducted in a South African context (Du Plessis, 2014; Stander, De Beer, & Stander, 2015), particularly with organisational citizenship behaviour as outcome. In addition, the role of workplace trust as a mechanism through which leaders influence their subordinates has also received limited attention in South Africa, particularly in the public health care sector. Workplace trust can be considered a consequence of authentic leadership (Clapp-Smith, Vogelsang, & Avey, 2009; Datta, 2015; Errazquin, 2013) and an antecedent of organisational citizenship behaviour (Altuntas & Baykal, 2010; Chen, Wang, Chang, & Hu, 2008). For the purposes of this study, workplace trust will be referred to as only trust.

Leaders are considered to be the primary influencers of their subordinates’ behaviour (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). As discussed above, the public health care sector and its employees are faced with numerous challenges. George et al. (2013) and
Harris et al. (2011) have found that the employees may feel inadequate to deal with the pressures associated with large numbers of individuals requiring quality health care. These pressures can contribute to the public health care sector’s service delivery difficulties. Consequently, employees need to engage in extra-role behaviours to improve the services that they render. These extra-role behaviours are known as organisational citizenship behaviour (Dash & Pradhan, 2014). There are various definitions of organisational citizenship behaviour. One of these definitions postulates that organisational citizenship behaviour focuses on individual behaviour that is discretionary and not formally recognised by an organisation’s reward system (Dash & Pradhan, 2014; Ibrahim, Ghani, & Salleh, 2013). Other authors denote that organisational citizenship behaviour is linked to the improvement of organisational effectiveness (Diedericks, 2012; Organ, 1997).

Leadership influences organisational citizenship behaviour (Hsieh & Wang, 2015), particularly through trust (Walumbwa, Christensen, & Hailey, 2011). Chalal and Mehta (2010) and Du Plessis, Wakelin, and Nel (2015) mention that if employees feel that they are trusted, they are more likely to go the “extra mile” in their work. According to Heyns and Rothmann (2015), an employee’s willingness to trust a leader is influenced by the character and actions of the leader. Engelbrecht, Heine, and Mahembe (2014) add to this by stating that trust is a vital element between leaders and subordinates which influences the degree to which subordinates perceive the work environment as being positive. In this study, the focus was specifically on authentic leadership. Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) define authentic leadership as a form of leadership that focuses on “positive psychological capacities and a positive ethical climate”, fostering the four dimensions of authentic leadership (p. 1). Authentic leadership has been researched in many contexts (Onorato & Zhu, 2014), specifically in a Western context (Avolio & Walumbwa, 2014) and has been demonstrated to have a positive impact on organisations, teams, and individuals (Avolio & Walumbwa, 2014; Rego, Vitória, Magalhães, Ribeiro, & Cunha, 2013; Woolley, Caza, Levy, & Jackson, 2007). However, leadership behaviour that is effective in one context is not necessarily effective in another context and a one-size-fits-all approach cannot be used indiscriminately (Avolio & Walumbwa, 2014). In line with this, the current study evaluates the effectiveness of authentic leadership in this particular organisation.

No empirical evidence exists in terms of the indirect effect that authentic leadership has on citizenship behaviours via trust. This study focused on trust in its three referents, including
trust in the organisation, trust in the immediate supervisor, and trust in co-workers to test the impact of perceived authentic leadership on organisational citizenship behaviour, both directly and indirectly.

**Literature Review**

*Authentic Leadership*

Several forms of leadership, including ethical, charismatic, servant, transactional, and transformational leadership have been studied in the past (e.g. Bass, 1990; Bass & Avolio, 1993; Engelbrecht et al., 2014; Shamir, House, & Arthur, 1993; Stone, Russell, & Patterson, 2004). Recently, research has focused extensively on positive and ethical forms of leadership (Engelbrecht et al., 2014; Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Zbierowski & Góra, 2014). Current research focuses on authentic leadership which is emphasised both in the academic field as well as in industry (Hsieh & Wang, 2015; Men & Stacks, 2014; Walumbwa et al., 2008). For the purpose of this study, authentic leadership was conceptualised as a higher order construct consisting of four lower-order dimensions, namely self-awareness, balanced processing, relational transparency and internalised moral perspective (Walumbwa et al., 2008).

*Self-awareness* refers to the leader’s ability to possess self-knowledge and to be aware of possible strengths, developmental areas, and beliefs as well as the impact thereof on followers (Gardner, Cogliser, Davis, & Dickens, 2011; Kernis, 2003; Men & Stacks, 2014). *Balanced processing* is defined as a leader’s objective evaluation and analysis of relevant information when considering the opinions of others in decision making (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Walumbwa et al., 2008). The third dimension, *relational transparency*, refers to the leader’s ability to openly share information and to present the self in an unpretentious manner (Kernis, 2003; Stander et al., 2015). Lastly, an *internalised moral perspective* is defined as the leader’s ability to withstand external pressures by committing to his or her own ethical and moral values (Gardner et al., 2011; Ryan & Deci, 2003; Walumbwa et al., 2008). It should be noted that authentic leadership will be measured from the employees’ perceptions with regard to the authenticity of their leaders.
Authentic leaders are perceived as leaders who show authenticity and are able to foster respect, credibility, and ultimately, trust among subordinates (Bamford, Wong, & Laschinger, 2013). Avolio and Walumbwa (2014) and Stander et al. (2015) further mentioned that an authentic leader inspires and motivates subordinates and that the authentic leader possesses a strong interpersonal orientation. This relational nature encourages subordinates to be able to relate to the leader and organisation (Avolio & Walumbwa, 2014). In addition, a stronger sense of identification is created among subordinates (Avolio & Walumbwa, 2014). Accordingly, authentic leaders have a profound impact on their subordinates as well as the organisations for which they work (Pues, Wesche, Streicher, Braun, & Frey, 2012). In their development of a three pillar authentic leadership model, Beddoes-Jones and Swailes (2015) have found that trust is at the foundation of authentic leadership. Likewise, a study conducted by Avolio and Gardner (2005) found that the personal integrity of an authentic leader, as well as the leader’s ability to engage in balanced processing, might lead to leader-subordinate relationships that are characterised by respect and trust. They further argued that in the investigation of a leader-subordinate exchange relationship, the Social Exchange Theory (SET; Blau, 1964) may be used (Avolio & Gardner, 2005).

The Social Exchange Theory (SET) suggests that the actions of individuals depend on “rewarding reactions” from others (Penger & Cĕrne, 2014, p. 511). The focus is thus on reciprocity. Leadership and trust can be perceived as a social exchange between leaders and subordinates (Hsieh & Wang, 2015). As a result, subordinates are likely to trust their leaders more if they perceive the leaders as being authentic. Studies conducted in Taiwan and Canada found that the authenticity of leaders is positively related to employee trust (Wang & Hsieh, 2013; Wong & Cummings, 2009). Despite Heyns and Rothman’s (2015) recent study in the South African context with regard to leaders’ influence on employee trust, there is still limited empirical evidence relating to the relationship between authentic leadership and workplace trust, specifically in the public health care sector in South Africa.

**Workplace Trust**

Workplace trust is conceptualised as the consistency between the perceptions of an individual with regard to a trust referent (organisation, immediate supervisor, and co-worker) and the individual’s subsequent actions (Ferres, 2003). These actions can include being supportive, competent, and mindful of others’ performance (Ferres & Travaglione, 2003). The focus is
consequently on trust in its three referents, namely organisation, immediate supervisor, and co-worker. Ferres (2003) operationalises trust in the organisation as openness when sharing information, fair organisational processes, and a supportive work environment. Organisational trust is the trust that employees have in the organisation itself (James, 2011), which is influenced by their perceptions of the effectiveness of organisational processes and whether the organisation is perceived to be reliable and honest (Galford & Drapeau, 2003). As leaders are seen as higher organisational authorities (Treviño & Brown, 2004), they are regarded as representatives of the organisation (O’Reilly, Caldwell, Chatman, Lapiz, & Self, 2010) and may influence the perceived trust that employees have in the organisation.

Trust in the immediate supervisor was operationalised as supervisors who listen when employees share information and who appreciate employees’ additional efforts (Ferres; 2003; Ferres & Travaglione, 2003). Consequently, James (2011) denoted that trust in the immediate supervisor transpires from fair treatment; when the needs of subordinates are considered during decision making. As authentic leaders are considered to act with integrity and have a sense of purpose while being cognisant of their core values (Hassan & Ahmed, 2011), they are likely to gain the trust of their subordinates as a result of their genuineness and consistency in terms of words and actions (Hsieh & Wang, 2015; Xiong & Fang, 2014).

Trust in the co-worker is operationalised as collegial support, truthful interactions, and appreciation for each other’s work (Ferres, 2003). It can further be demarcated as having confidence in colleagues to be competent and act in a fair and ethical manner (James, 2011). Onorato and Zhu (2014) postulated that authentic leaders succeed in creating a positive and ethical organisational climate that is characterised by openness, transparency, and communication (Mazutis & Slawinski, 2007). This leader is regarded as a role model (Khan, 2010), able to facilitate authenticity among subordinates (Avolio & Gardner, 2005; Avolio et al., 2004). It is this perception of co-workers that facilitates the process of authentic leadership’s influence on trust in co-workers.

Although Schoeman (2012) studied the role of trust in its three referents, there are still limited studies that emphasise all three referents in the South African context, specifically with authentic leadership as antecedent and organisational citizenship behaviour as an outcome. Schoeman (2012) focused on determining whether trust in its three referents correlates with psychological capital (PsyCap) and workplace well-being. Other South
African studies (e.g. Du Plessis et al., 2015; Stander et al., 2015) that included trust as a construct focused on trust in only one or two referents and not in all three referents. Du Plessis et al. (2015) focused only on trust in the immediate supervisor, whereas Stander et al. (2015) emphasised trust in the organisation. The focus on all three trust referents is important as it can guide future interventions and provide the organisation with an indication on how to structure and prioritise interventions if they understand which referent mostly affects employees.

Similar to the relationship between authentic leadership and workplace trust, the relationship between trust and organisational citizenship behaviour can also be studied from a Social Exchange Theory (SET) perspective. For example, employees who trust their organisation, supervisors and/or co-workers, are more likely to exert extra effort in their work. Wong, Wong, and Ngo (2012) confirm this by stating that high levels of organisational trust motivate employees to engage in organisational citizenship behaviour. A study conducted by Altuntas and Baykal (2010) found that nurses who trust in their organisation, immediate supervisor, and co-workers displayed organisational citizenship behaviours. Other studies have also found that there is a relationship between trust in the organisation and organisational citizenship behaviour (Paille & Bourdeau, 2010; Wong, Ngo, & Wong, 2006).

Organisational Citizenship Behaviour

Organ (1997) defined organisational citizenship behaviour as the determined and unrestricted behaviour of employees which contributes to the organisation’s effectiveness and functioning. In addition, Bester, Stander, and Van Zyl (2015) stated that instead of being a formal requirement, organisational citizenship behaviour is an employee’s personal choice. For the purpose of this study, organisational citizenship behaviour is conceptualised as consisting of two dimensions, an interpersonal orientation and an organisational orientation (Diedericks, 2012). Interpersonal orientation refers to employees’ willingness to provide assistance to co-workers, whereas the organisational orientation refers to the employees’ willingness to exert additional effort on behalf of the organisation (Organ & Paine, 1999; Rothmann, 2010).

Various studies have confirmed that effective leadership can be regarded as an antecedent of organisational citizenship behaviour (Al-Sharafi & Rajiani, 2013; Chalal & Mehta, 2010).
Al-Sharafi and Rajiani (2013) found a positive relationship between leadership and organisational citizenship behaviour. More specifically, Pues et al. (2012) reported that authentic leadership can be seen as an antecedent of organisational citizenship behaviour. They regarded organisational citizenship behaviour from a supervisor-rated perspective (Pues et al., 2012), instead of focusing on employees’ perceptions of their organisational citizenship behaviours. The focus on employee perceptions is important in order to understand how the employee views and/or feels about the situation. This study focuses on the effect of authentic leadership on organisational citizenship behaviour in its two dimensions which include co-worker and organisational assistance.

A theoretical framework that supports the hypothesised relationship between authentic leadership and organisational citizenship behaviour is the Job-Demands Resources (JD-R) model (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Van Den Broeck, Van Ruysseveldt, Vanbelle, and De Witte (2013) stated that the JD-R model divides organisational characteristics into job demands and job resources. For the purpose of this study, authentic leadership was classified as a job resource. Job resources can contribute to the achievement of work-related goals and studies have found that job resources may lead to organisational citizenship behaviour (Demerouti et al., 2001; Taris & Feij, 2004; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). As a result, organisational citizenship behaviour was identified as a behavioural outcome.

The Indirect Effect of Workplace Trust

Trust is regarded as a predictor of organisational citizenship behaviour (Wong et al., 2012) and may be considered as having the potential to affect the relationship between authentic leadership and organisational citizenship behaviour. According to Dannhauser (2007), trust can act as a causal, mediating, moderating, or outcome variable in an organisational setting. Wong et al. (2012) mentioned that trust emerges through a continued exchange of benefits between parties, which in turn influences the work outcomes of employees. Many studies have used trust as a mediator, but not in its three referents (e.g. Du Plessis et al., 2015; Halbesleben & Wheeler, 2012). A study that Altuntas and Baykal (2010) reported on found that supervisor trust plays a mediating role in contributing to organisational citizenship behaviour. Additionally, Hsieh and Wang (2015) found that supervisor trust fully mediates the relationship between authentic leadership and work engagement. Another study found
that both organisational and supervisor trust mediate the relationship between justice and organisational citizenship behaviour, but the mediational impact of the two referents differs as trust in the organisation partially mediated this relationship, whilst supervisor trust was found to be a full mediator (Aryee, Budhwar, & Chen, 2002).

Most authors focused on trust in the immediate supervisor and/or leader (e.g. Du Plessis et al., 2015; Engelbrecht et al., 2014; Van Staden, 2007). Stander et al. (2015) specifically focused on trust in the organisation, whereas Schlechter and Strauss (2008) studied both trust in the immediate supervisor and trust in co-workers. Recent studies on trust either focused on one referent of trust (e.g. Hsieh & Wang, 2015; supervisor trust), two referents of trust (e.g. Paliszkiewicz, Koohang, & Nord, 2014; organisational and supervisor trust), or three referents on trust (e.g. Cho & Park, 2011; trust in the organisation, trust in the immediate supervisor, and trust in co-workers). These studies, with the exception of the study of Cho and Park (2011), did not attempt to determine the strength of the indirect effects of the different trust referents. The study by Cho and Park (2011) aimed to determine whether trust in its three referents mediates the relationship between managerial practices and employee attitudes of commitment and satisfaction. In this study, it is vital to determine how employees’ perceptions of authentic leadership influence organisational citizenship through the three referents of trust, as this relationship has not been empirically tested to date in this organisation.

Based on the above discussion, the aims and hypotheses of the study were outlined as follows:

Hypothesis 1: Authentic leadership is a significant predictor of trust in the organisation, immediate supervisor and co-workers.

Hypothesis 2: Trust in the organisation, immediate supervisor and co-workers are a significant predictor of organisational citizenship behaviour.

Hypothesis 3: Authentic leadership is a significant predictor of organisational citizenship behaviour.

Hypothesis 4: Authentic leadership has an indirect effect on organisational citizenship behaviour through trust in the organisation, immediate supervisor and co-workers.

Hypothesis 5: There are differences in the strength of the indirect effects of different workplace trust referents.
The hypothesised model is illustrated in Figure 2 below:

![Diagram of hypothesised model]

**Figure 2.** A hypothesised model of authentic leadership and organisational citizenship behaviour with the indirect effects of workplace trust

**RESEARCH DESIGN**

**Research Approach**

For the purpose of this study, a quantitative research approach was used to achieve the research objectives. A cross-sectional survey design was followed where the aim was to collect data from the participants at a single point in time (Maree, 2011; Salkind, 2011). Furthermore, the nature of the objectives of this study was both descriptive and exploratory. This indicates that some of the hypotheses were supported by literature; however, the indirect effects of authentic leadership on organisational citizenship behaviour through trust have not been empirically tested before.
Research Method

Research Participants

A non-probability sampling method was used. Specifically, convenience sampling was used as the participants were selected on the basis of their accessibility. A gatekeeper at each public health care institution was asked to disseminate the questionnaires to other employees as well. For the purpose of this study, English literacy was a requirement.

Table 1

Characteristics of the Participants (N = 633)

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
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<td>Setswana</td>
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<td>40.3</td>
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<td>5-9 years</td>
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<td>10-15 years</td>
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<td>&gt;15 years</td>
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<td>19.2</td>
</tr>
</tbody>
</table>

*Percentages not totalling to a 100% due to missing values
Based on Table 1, the sample - out of a population of approximately 2 000 - consisted of 633 employees working in the public health care sector in the Sedibeng district. The sample was drawn from 27 hospitals and/or clinics in the Sedibeng region and the participants had an average age of 42.44 years (SD = 12.27). The majority of the sample consisted of females (79.6%) and the most representative home language was Sesotho (44.7%), followed by isiZulu (19.2%). The majority of the participants were black (87.9%) and 38.5% of the sample possessed a diploma/tertiary certificate. Accordingly, 70.2% of the participants possessed a post-matric or tertiary qualification. Additionally, 40.3% of the sample has been working for the organisation for less than five years, with 34.1% working for the organisation for more than 15 years. Finally, 47.7% of employees have been working in their current position for less than five years. In terms of function, the majority of the sample indicated other (50.9%), followed by administration (19.6%), management (17.4%), and specialist (12.0%).

**Measuring Instruments**

A biographical questionnaire, as well as three measuring instruments, was used to measure the constructs of authentic leadership, workplace trust, and organisational citizenship behaviour.

*Biological questionnaire.* A biographical questionnaire was used to gain information regarding the demographic characteristics of the participants. The information obtained includes the following: Age, gender, home language, race, educational qualifications, length of employment in the organisation as well as the length of employment in the current position.

*Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011).* The ALI was used to determine subordinates’ perceptions regarding the authenticity of their leaders. The four dimensions of self-awareness, balanced processing, relational transparency, and internalised moral perspective were used to measure the perceptions of these employees. The ALI measures the same dimensions as the Authentic Leadership Questionnaire (ALQ) developed by Walumbwa et al. (2008). Neider and Schriesheim (2011) developed the ALI as they were concerned about the subjective content analysis of the ALQ and the “garbage parameters” used to improve model fit. The ALI contains fourteen items where response options are
arranged on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The ALI includes items such as: “My leader shows consistency between his/her beliefs” (relational transparency). “My leader carefully listens to alternative perspectives before reaching a conclusion” (balanced processing), “My leader uses his/her core beliefs to make decisions (internalised moral perspective), and “My leader described accurately the way that others view his/her abilities (self-awareness). Previous studies found acceptable reliabilities with Cronbach’s alpha coefficients ranging between 0.74 and 0.90 (Men & Stacks, 2014; Neider & Schriesheim, 2011). Scores from the ALI achieved a composite reliability (ρ) of 0.92 in the present study which indicates acceptable reliability.

Workplace Trust Survey (WTS; Ferres, 2003). The WTS was used to measure trust in the organisation, trust in the immediate supervisor, as well as trust in co-workers. It consists of 32 items, with eleven items related to trust in the organisation, nine items related to supervisor trust, and twelve items related to trust in co-workers. Items were scored using a four-point Likert-type scale which ranged from 1 (strongly disagree) to 4 (strongly agree). Example items include: “I feel that information can be shared openly within my organisation” (organisation); “I feel that my supervisor keeps personal discussions confidential” (supervisor); and “I think that my co-workers act reliably from one moment to the next” (co-workers). According to Ferres and Travaglione (2003), the internal consistency of the items yielded acceptable reliabilities, with Cronbach’s alpha coefficients: $\alpha = 0.95$ (organisation); $\alpha = 0.96$ (immediate supervisor); and $\alpha = 0.93$ (co-workers). The composite reliabilities (ρ) of the three subscales of WTS in the present study were: 0.87 (trust in the organisation), 0.88 (trust in the immediate supervisor) and 0.87 (trust in co-worker).

Organisational Citizenship Behaviour Scale (OCBS; Rothmann, 2010). The OCBS was used to measure employees’ organisational citizenship behaviour. As conceptualised in this study, the OCBS measures two dimensions, including employees’ willingness to assist co-workers as well as their willingness to assist the organisation. The OCBS contains six items with three items relating to the assistance to co-workers subscale; and three items measuring the organisational assistance subscale. A six-point Likert-type scale which ranged from 1 (strongly disagree) to 6 (strongly agree) was used. Example items contained in the scale include “I show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations” (co-worker assistance) and “I defend the organisation when other employees criticize it” (organisational assistance). According to Diedericks (2012),
both the dimensions yielded acceptable reliabilities, with assistance to co-workers ($\alpha = 0.78$) and assistance to the organisation ($\alpha = 0.80$). In the current study, the OCBS achieved a composite reliability of 0.73.

**Research Procedure**

Ethical approval for this study was obtained from the North-West University’s Ethics Committee (NWU-HS-2015-0106) in August 2015. The data was collected as part of a larger project focusing on work-related well-being in the Sedibeng district. The research was conducted in a fair and ethical manner and participation was voluntary. After permission from a representative of the Department of Health in the Sedibeng district had been obtained, the questionnaires were distributed at the hospitals/clinics. A consent letter as well as an information letter was attached to the questionnaires. The information letter explained the objectives of the study as well as the voluntary nature of participation. The participants were given the opportunity to complete the questionnaires at a place of their choice. Once the questionnaires had been completed, participants were required to deposit the completed questionnaires in a secured box at each facility.

**Statistical Analysis**

Mplus 7.31 (Muthén & Muthén, 1998-2012) and SPSS 22 (IBM Corporation, 2013) were used to analyse the data in the study.

Structural equation modelling (SEM), more specifically, a two-step model generating approach, also referred to as latent variable modelling, was used (Kline, 2011). Firstly, confirmatory factor analyses (CFA) were performed in order to determine the factor structure of authentic leadership, workplace trust, and organisational citizenship behaviour respectively. Measurement and structural models were tested with a Maximum Likelihood Robust estimator (MLR) as it takes skewness and kurtosis into consideration (Byrne, 2012). The structural model was then estimated by means of inserting the hypothesised regression paths.
The model’s fit to the data was determined by the following parameter estimates and indices (Byrne, 2012): The absolute fit indices included chi-square (χ²), degrees of freedom (df) and root mean square error of approximation (RMSEA; smaller than 0.08 indicates acceptable fit) (Byrne, 2012; Hair, Black, Babin, & Andersen, 2010). Incremental fit indices comprised the Tucker-Lewis Index (TLI) as well as the index of choice - the Comparative Fit Index (CFI) (Byrne, 2012). With regard to CFI and TLI, values higher than 0.95 show acceptable fit (Hu & Bentler, 1999). Additionally, two fit statistics referred to as the Akaike Information Criterion (AIC) and the Bayes Information Criterion (BIC) were utilised to compare different measurement and structural models. For both these fit statistics, a lower value indicates better fit (Hair et al., 2010).

The reliability for each scale was computed using composite reliability coefficients (ρ) (Raykov, 2009) with a cut-off point of 0.70 (Wang & Wang, 2012). Composite reliability was used as it is more effective than Cronbach’s alpha coefficients in the use of latent variable modelling (Raykov, 2009). Based on the best-fitting structural model, the potential indirect effects of workplace trust were inserted. Indirect effects of workplace trust were determined by bootstrapping and the construction of bias-corrected 95% confidence intervals (CIs) (Mokgele & Rothmann, 2014). The practical significance of the indirect effects was tested by means of the kappa-squared (K²) effect sizes to determine a small (below 0.09), medium (between 0.09 and 0.25), and/or large effect (above 0.25) respectively (Preacher & Kelley, 2011).

Results

First, the CFAs of the measuring instruments and its factor structures are described, followed by an explanation of the steps that were taken to enhance model fit. Second, the results of tests used to compare alternative measurement models focusing on the relations among authentic leadership, workplace trust in its three referents, and organisational citizenship behaviour are reported. An analysis of the results of alternative structural models will then be described. Finally, the indirect effects of authentic leadership will be explained.
Confirmatory Factor Analysis for the Measuring Instruments

CFA was used to determine the factor structure of authentic leadership, workplace trust, and organisational citizenship behaviour respectively.

Authentic leadership was specified as a four-factor structure by the authors (Neider & Schriesheim, 2011) which yielded the following fit indices: $\chi^2 = 426.94 \ (df = 71; \ p < 0.001)$, CFI = 0.89, TLI = 0.86, and RMSEA = 0.09. Secondly, workplace trust was specified as a three-factor structure by its author (Ferres, 2003), resulting in the following fit indices: $\chi^2 = 1612.84 \ (df = 461; \ p < 0.001)$, CFI = 0.86, TLI = 0.85 and RMSEA = 0.06. Finally, organisational citizenship behaviour, specified as a two-factor structure by Rothmann (2010), yielded the following fit indices: $\chi^2 = 102.50 \ (df = 8; \ p < 0.001)$, CFI = 0.87, TLI = 0.75 and RMSEA = 0.14. However, based on the fit indices, this hypothesised measurement model yielded poor fit once specified using Mplus. Consequently, model development was done through the identification of possible misspecifications, known as MIs (modification indices) (Byrne, 2012).

To improve model fit, certain items from the measuring instruments were deleted, error variances of some items were correlated and the latent variables’ factor structures were re-specified in Mplus. The items deleted from the respective measuring instruments were: a) authentic leadership (five items; AL2, AL5, AL9, AL13, and AL14); b) organisational citizenship behaviour (one item; OCB1); and c) workplace trust (10 items; WT1, WT3, WT6, WT11, WT14, WT15, WT17, WT19, WT26, and WT31). These items were deleted due to the fact that the MIs were either extremely high or the error variances of the items correlated various times with those of other items. Other reasons for the removal of items included: a) the presence of cross-loadings where items significantly loaded onto more than one factor and also seemed to be more associated with another factor than its own hypothetical structure; and b) too low or non-significant factor loadings contributing to poor fit. Model fit was also improved by allowing as few as possible error variances of items to correlate, as indicated in the specification of the measurement model below.

Once the problematic items were removed, the following factor structures were specified using Mplus. Both authentic leadership and organisational citizenship behaviour were used as one-factor models, whereas workplace trust remained a three-factor model. The four factors
of authentic leadership were correlated, which resulted in multicollinearity as self-awareness correlated too highly with both relational transparency \((r = 1.00)\) and balanced processing \((r = 1.04)\). For further analyses, it was decided to specify authentic leadership as a one-factor structure (Stander et al., 2015). The correlation of the two factors, organisational citizenship behaviour (co-worker) and organisational citizenship behaviour (organisation) also resulted in multicollinearity \((r = 1.17)\). For subsequent analyses, it was decided to specify organisational citizenship behaviour as a one-factor model as this corresponds with Beal III, Stavros, and Cole’s (2013) study. By removing these items, overall model fit could be improved. The fit indices of the re-specified models included: a) authentic leadership: \(\chi^2 = 73.59\) \((df = 26; p < 0.001)\), CFI = 0.98, TLI = 0.97, RMSEA = 0.05; b) workplace trust: \(\chi^2 = 442.16\) \((df = 203; p < 0.001)\), CFI = 0.96, TLI = 0.95 and RMSEA = 0.04; and c) organisational citizenship behaviour: \(\chi^2 = 10.64\) \((df = 4; p < 0.001)\), CFI = 0.99, TLI = 0.97 and RMSEA = 0.05. Based on these fit indices, the cut-off values of CFI (> 0.95), TLI (> 0.95) and RMSEA (≤ 0.08) were reached, indicating good model fit according to Hu and Bentler (1999).

The measurement model was thus specified with nine items measuring authentic leadership (AL1, AL3, AL4, AL6, AL7, AL8, AL10, AL11, and AL12), five items measuring organisational citizenship behaviour (OCB2, OCB3, OCB4, OCB5, and OCB6), and 22 items measuring workplace trust and. More specifically, trust in the organisation consisted of six items (WT2, WT4, WT7, WT9, WT10, and WT12), trust in immediate supervisor of nine items (WT5, WT8, WT13, WT16, WT18, WT21, WT23, WT28, and WT32), and trust in co-workers of seven items (WT20, WT22, WT24, WT25, WT27, WT29, and WT30). The error variances of AL3 (“My leader asks for ideas that challenge his/her core beliefs”) (self-awareness) were correlated with those of AL4 (“My leader describes accurately the way that others view his/her abilities”) (balanced processing), based on an MI of 91.71. Possible item content overlap may exist as both the items relate to the leader’s abilities and/or beliefs as well as how others see this.

In addition, the error variances of OCB4 (“I go out of my way to make newer employees feel welcome in the work group”) and OCB 5 (“I show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations”) were also correlated based on an MI of 59.88. In this regard, there might be possible item content overlap as both items relate to assisting and supporting co-workers. In terms of workplace trust, the error
variances of WT29 (“I feel that I can trust my co-workers to do their jobs well”) were correlated with those of WT30 (“I believe that my co-workers give me all the information to assist me at work”), based on an MI of 88.75; both items relate to trust in co-workers which might result in item content overlap. The item content of OCB4 and OCB5 as well as WT29 and WT30 relates to co-workers which could have resulted in the high MI values.

Testing Measurement Models

Using SEM, a five-factor measurement model as well as two alternative models was tested to determine which measurement model fitted the data best. Model 1 consisted of five first-order latent variables, namely: a) authentic leadership (measured by nine observed indicators); b) trust in the organisation (measured by six observed indicators); c) trust in the immediate supervisor (measured by nine observed indicators); d) trust in co-workers (measured by seven observed indicators); and finally, e) organisational citizenship behaviour (measured by five observed indicators). All the latent variables specified in Model 1 were allowed to correlate.

Model 2 was specified with 22 observed indicators measuring workplace trust as a one-factor structure. Both authentic leadership (nine observed indicators) and organisational citizenship behaviour (five observed indicators) were also specified as a one-factor structure. Finally, Model 3 was specified with workplace trust as a two-factor structure which included: a) Trust in the organisation and immediate supervisor (measured by 15 observed indicators); and b) trust in co-worker (measured by seven observed indicators). Schoeman (2012) used workplace trust as a two-factor structure, combining trust in the immediate supervisor and trust in the organisation as one factor and trust in co-worker as the second factor. Similar to Models 1 and 2, authentic leadership and organisational citizenship behaviour were specified as one-factor structures.

The fit statistics of the measurement model and its competing measurement models are presented in Table 2. Model 1 fitted the data best as determined by comparing the AIC and BIC values (the lower the value, the better the fit). Other fit indices were also considered to determine the models’ fit to the data, including but not limited to the $\chi^2$, CFI, TLI and RMSEA. According to Hu and Bentler (1999), these values indicate a good fit of the model to the data as CFI and TLI were equal to or higher than 0.95, and RMSEA was lower than
0.08 at 0.05. The standardised coefficients of items ranged from 0.57 to 0.83 and were found to be statistically significant. This means that the items loaded significantly onto the specified factors without cross-loading occurring.

Table 2

*Fit Statistics of Competing Measurement Models*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>AIC</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>1074.64</td>
<td>581</td>
<td>0.95</td>
<td>0.95</td>
<td>0.04</td>
<td>[0.033, 0.040]</td>
<td>57657.89</td>
</tr>
<tr>
<td>Model 2</td>
<td>1944.96</td>
<td>588</td>
<td>0.86</td>
<td>0.85</td>
<td>0.06</td>
<td>[0.058, 0.064]</td>
<td>58737.09</td>
</tr>
<tr>
<td>Model 3</td>
<td>1485.58</td>
<td>585</td>
<td>0.91</td>
<td>0.90</td>
<td>0.05</td>
<td>[0.047, 0.053]</td>
<td>58168.09</td>
</tr>
</tbody>
</table>

$\chi^2$ = chi-Square statistic; df = degree of freedom; CFI = Comparative fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; AIC = Akaike Information Criterion; BIC = Bayes Information Criterion.

As indicated in Table 3, difference testing for changes in the $\chi^2$ in terms of the competing measurement models was conducted. Due to the use of the MLR-estimator, change in chi-square values cannot be directly compared and Satorra-Bentler difference testing was performed (Satorra & Bentler, 1999). Results in Table 3 indicate that Model 1 fitted the data significantly better than the competing models when comparing the change in chi-square values.

Table 3

*Difference Testing for Changes in Chi-square in Competing Measurement Models*

<table>
<thead>
<tr>
<th>Model</th>
<th>S-B $\chi^2$</th>
<th>$\Delta df$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 vs. Model 2</td>
<td>557.97</td>
<td>7</td>
<td>0.00**</td>
</tr>
<tr>
<td>Model 1 vs. Model 3</td>
<td>233.78</td>
<td>4</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

** p < 0.01

Testing the Structural Model

Table 4 contains descriptive statistics, the reliability coefficients, and correlations between authentic leadership, trust in the organisation, trust in the immediate supervisor, trust in co-worker, and organisational citizenship behaviour. The composite reliability coefficients range from 0.78 to 0.92, indicating acceptable reliability according to Wang and Wang’s (2012) cut-off value of 0.70. The relationships between all the variables were statistically ($p < 0.01$) and practically significant with either a small, medium or large effect. According to the results in Table 4, all variables were significantly and positively related to organisational
citizenship behaviour - ranging between 0.29 and 0.42. Authentic leadership was also positively and significantly related to the three referents of trust ($r = 0.48$ to $r = 0.82$).

Table 4

*Correlation Matrix Including Reliabilities, Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>$\rho$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authentic leadership</td>
<td>3.37</td>
<td>0.92</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Workplace trust: Organisation</td>
<td>3.14</td>
<td>0.88</td>
<td>0.87</td>
<td>0.60‡**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Workplace trust: Supervisor</td>
<td>3.52</td>
<td>0.89</td>
<td>0.92</td>
<td>0.82‡**</td>
<td>0.75‡**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4. Workplace trust: Co-workers</td>
<td>3.54</td>
<td>0.74</td>
<td>0.87</td>
<td>0.48†**</td>
<td>0.70‡**</td>
<td>0.71‡**</td>
<td>-</td>
</tr>
<tr>
<td>5. Organisational citizenship behaviour</td>
<td>3.44</td>
<td>1.04</td>
<td>0.78</td>
<td>0.29**</td>
<td>0.42†**</td>
<td>0.34†**</td>
<td>0.41†**</td>
</tr>
</tbody>
</table>

For statistical significance: * $p < 0.05$ and ** $p < 0.01$
For practical significance: † $r > 0.30$ and ‡ $r > 0.50$

$M =$ mean, $SD =$ standard deviation, $\rho =$ composite reliability coefficient

Based on the fact that the data was cross-sectional in nature, two other models were tested. Model 2 (also known as the direct pathways only model) did not meet the required cut-off values. However, Model 3 also (known as the direct and indirect pathways model) showed acceptable fit to the data with: $\chi^2 = 1074.64$, $df = 581$, CFI = 0.95, TLI = 0.95 and RMSEA = 0.04, 95% CI [0.033, 0.040]. Model 1’s fit was slightly better than Model 3’s with lower BIC and AIC values. Although Model 1 showed the best fit, it differed from the hypothesised model.

Table 5 indicates the difference testing for changes in the $\chi^2$ with regard to competing structural models. The results show that Model 3 fitted the data significantly better than Model 2 after Satorra-Bentler difference testing had been performed. Model 1 fitted the data marginally better than Model 3 with a S-B $\chi^2 = 1.83$ ($df = 1$), resulting in a non-significant change. Since Model 1 fitted the data better it was decided to carry on with the analyses using this model.

Table 5

*Difference Testing for Changes in Chi-square in Competing Structural Models*

<table>
<thead>
<tr>
<th>Model</th>
<th>S-B $\chi^2$</th>
<th>$\Delta df$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 3 vs Model 2</td>
<td>305.18</td>
<td>3</td>
<td>0.00**</td>
</tr>
<tr>
<td>Model 3 vs Model 1</td>
<td>1.83</td>
<td>1</td>
<td>0.18</td>
</tr>
</tbody>
</table>

** $p < 0.01$
The measurement model formed the basis for the structural models and latent variable modelling was used to test the direction of the hypothesised relationships. Table 6 displays the standardised path coefficients estimated for the competing structural models. Three structural models were tested and both Model 1 (indirect pathways) and Model 3 (direct and indirect pathways) showed a good fit to the data. However, Model 1 fitted the data best with the lowest AIC and BIC values, as well as a non-significant change in chi-square. This model included paths from authentic leadership to trust in the organisation, trust in the immediate supervisor, and trust in co-workers, respectively. Paths from workplace trust divided in its three referents to organisational citizenship behaviour were also included. Based on this model, authentic leadership was found to be a significant predictor of trust in the organisation ($\beta = 0.60, p < 0.01$), trust in the immediate supervisor ($\beta = 0.82, p < 0.01$) and trust in co-workers ($\beta = 0.48, p < 0.01$). Hypothesis 1 was accepted as authentic leadership was found to be a significant predictor of workplace trust in all three referents respectively.

Additionally, both trust in the organisation ($\beta = 0.28, p < 0.01$) and trust in co-workers ($\beta = 0.22, p < 0.05$) were significant predictors of organisational citizenship behaviour and had the anticipated positive direction. Trust in the immediate supervisor was not a significant predictor of organisational citizenship behaviour ($\beta = -0.02, p = 0.81$). Hypothesis 2 was only partially accepted as only trust in the organisation and co-workers significantly influenced organisational citizenship behaviour. Authentic leadership was not found to be a significant predictor of organisational citizenship behaviour. The third hypothesis, which states that authentic leadership is a significant predictor of organisational citizenship behaviour, was rejected.
### Table 6

**Initial Framework Fit Indices and Standardised Path Coefficients**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Indirect pathways (Model 1)</th>
<th>Direct pathways (Model 2)</th>
<th>Direct and indirect pathways (Model 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>1076.47</td>
<td>1506.21</td>
<td>1074.64</td>
</tr>
<tr>
<td>$Df$</td>
<td>582</td>
<td>584</td>
<td>581</td>
</tr>
<tr>
<td>CFI</td>
<td>0.95</td>
<td>0.91</td>
<td>0.95</td>
</tr>
<tr>
<td>TLI</td>
<td>0.95</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.04</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>95% CI</td>
<td>[0.03, 0.04]</td>
<td>[0.05, 0.053]</td>
<td>[0.03, 0.04]</td>
</tr>
<tr>
<td>AIC</td>
<td>57657.69</td>
<td>58189.68</td>
<td>57657.89</td>
</tr>
<tr>
<td>BIC</td>
<td>58190.03</td>
<td>58713.14</td>
<td>58194.66</td>
</tr>
</tbody>
</table>

#### Direct effects on organisational citizenship behaviour

<table>
<thead>
<tr>
<th></th>
<th>Authentic leadership</th>
<th>Workplace trust: Organisation</th>
<th>Workplace trust: Supervisor</th>
<th>Workplace trust: Co-workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effects on workplace trust: Organisation</td>
<td>0.60**</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Direct effects on workplace trust: Supervisor</td>
<td>0.82**</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Direct effects on workplace trust: Co-workers</td>
<td>0.48**</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05  **p < 0.01

Figure 3 shows the standardised path coefficients that were estimated for the best-fitting model. This figure only illustrates regression paths and the correlations that were permitted among workplace trust in its three referents.
Figure 3. The best-fitting structural model

From Figure 3, it is evident that 36% of the variance in trust in the organisation could be explained by authentic leadership. Additionally, authentic leadership explained 67% of the variance in trust in the immediate supervisor and 23% in trust in co-workers. Finally, 21% of the variance in organisational citizenship behaviour was explained by authentic leadership as well as the three referents of trust.

**Indirect Effects of Workplace Trust**

To determine whether any relationships in the model were affected by workplace trust, bootstrapping (with 5,000 samples) was used. Two-sided bias-corrected 95% CIs were constructed to evaluate indirect effects. Table 7 indicates the lower and upper CIs, as well as the estimates and standard errors of the tested indirect effects. From the Table, it is evident that authentic leadership had a significant indirect effect on organisational citizenship
behaviour through trust in the organisation ($\beta = 0.17$, $p < 0.01$, 95% CI [0.06, 0.29]) and trust in co-workers ($\beta = 0.11$, $p < 0.05$, 95% CI [0.02, 0.20]). Hypothesis 4 was partially accepted as only two referents of trust (trust in the organisation and co-worker) influenced the relation between authentic leadership and organisational citizenship behaviour indirectly.

Based on the results in Table 7, it is evident that trust in the organisation ($\beta = 0.17$, $p < 0.01$, $K^2 = 0.21$) had a greater indirect effect (medium) than trust in co-workers ($\beta = 0.11$, $p < 0.05$, $K^2 = 0.14$) with a small effect. Trust in the immediate supervisor did not significantly indirectly affect organisational citizenship behaviour ($\beta = -0.02$, $K^2 = 0.02$) and had a negligibly small effect. Hypothesis 5, focusing on the differences in the strength of the indirect effects of different trust referents could be supported.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Workplace trust: Organisation</th>
<th>Workplace trust: Supervisor</th>
<th>Workplace trust: Co-workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est.</td>
<td>SE</td>
<td>95% CI</td>
</tr>
<tr>
<td>Organisational citizenship behaviour</td>
<td>0.17**</td>
<td>0.06</td>
<td>[0.06, 0.29]</td>
</tr>
</tbody>
</table>

Est.: Estimate, SE: standard error, CI: confidence interval
*p < 0.05; **p < 0.01

DISCUSSION

The aim of this study was to explore the influence of authentic leadership through workplace trust (conceptualised as trust in the organisation, immediate supervisor, and co-workers) and organisational citizenship behaviour in the public health care sector. This was done to provide an understanding of how authentic leadership can evoke a more trusting workforce, resulting in employees going the “extra mile”. This is specifically relevant in the South African public health care sector which is being challenged by service delivery difficulties, a lack of resources and trying working conditions characterised by work overload and a distrust in leadership (Barnard & Simbhoo, 2014; Christian & Crisp, 2012; George et al., 2013). Al-Sharafi and Rajiani (2013) have mentioned that organisational citizenship behaviour has a positive impact on many aspects of the organisation, including performance, customer satisfaction, and profitability. Therefore, understanding whether authentic leadership predicts
organisational citizenship behaviour is important, but it is also important to determine if trust influences this prediction.

The structural model indicated that authentic leadership positively influenced workplace trust in its three referents. In this regard, leaders who are perceived as being objective, authentic, sharing information with others, and listening to subordinates’ ideas (Neider & Schriesheim, 2011) are more likely to encourage trust in the organisation, supervisors, and co-workers. The rationale behind this is that authentic leaders are perceived to be trustworthy, genuine, and reliable (Avolio & Gardner, 2005; Ilies, Morgeson, & Nahrgang, 2005). In addition, authentic leaders have insight into their strengths, growth areas, values, and beliefs which allows subordinates to experience the organisation and its leaders as reliable, supportive, and competent. If leaders are regarded as objective and fair in their decision making as well as being considerate of the ideas of others, a psychologically safe organisational climate can be created as employees will be more likely to trust in the organisation as being supportive. Such an organisational climate will allow employees to trust in their managers; they might also feel that their supervisors listen to them, are honest and appreciate their work. Cho and Park (2011) emphasise that the Leader-Member Exchange (LMX) theory regards trust in the supervisor as an important indicator focusing on the quality of the relationship between a leader/supervisor/manager and followers. Leaders who are perceived to be genuine and open in expressing their feelings might encourage a climate where people will be willing to admit their mistakes and to challenge co-workers and/or managers in order to enhance performance. As a result, employees might be prone to regard the organisation and its management structures as effective and supportive. It is probable that authentic leaders could succeed in creating a positive and ethical organisational climate, characterised by openness and transparency which might facilitate trust among employees (Avolio et al., 2004). This climate can encourage employees to have confidence in their colleagues to be competent, fair, and ethical. According to Lencioni (2005), when employees trust one another, they are more comfortable to being open about their growth areas and fears.

These findings are in line with previous studies that found a positive relationship between leadership practices and workplace trust (e.g. Dannhauser, 2007; Engelbrecht et al., 2014; Errazquin, 2013; Hartog, Shippers, & Koopman, 2002; Stander et al., 2015; Wang & Hsieh, 2013). Other authors have also consistently linked authenticity in leaders to trust behaviours
(Harter, 2002; Harter, Schmidt, & Keys, 2003). In addition, Wong, Laschinger, and Cummings (2010) denoted that authentic leadership is important in building trust and creating a healthy work environment, especially in health care institutions. According to Stander et al. (2015), authentic leadership can be regarded as a positive predictor of trust in the organisation. Effective leaders act as role models for their subordinates, thus enhancing trust (Luthans, Norman, & Hughes, 2006; Schlechter & Strauss, 2008). Studies focusing on authentic leadership and trust in the supervisor also found a positive influence of authentic leadership on trust in the supervisor (Clapp-Smith et al., 2009; Errazquin, 2013; Hassan & Ahmed, 2011). Heyns and Rothmann (2015) determined that when leaders are perceived as being trustworthy, followers are likely to reciprocate by engaging in trusting behaviours. Subordinates’ perceptions of their leaders as a role model may evoke trust in co-workers.

Further results showed that both trust in the organisation and trust in co-workers significantly influenced organisational citizenship behaviour. These findings indicate that when employees work in an environment that they perceive as being supportive, fair, reliable, and where others are mindful in recognising their performance and abilities, they will be more likely to go beyond what is formally expected of them – irrespective of whether they are doing it for their co-workers or for the organisation itself. Additionally, these employees might also display a willingness to put in extra work if they perceive their organisation as being fair, open about information-sharing, effective, and sustainable. Numerous studies have found a significant relation between trust in the organisation and organisational citizenship behaviour (Aryee et al., 2002; Dar, 2010; Schoeman, 2012; Wong et al., 2012). A study conducted on nurses by Altuntas and Baykal (2010) has revealed that nurses who trust in their organisations, supervisors, and co-workers are more likely to engage in extra-role behaviours. Trust among co-workers can facilitate interpersonal helping behaviours (Cho & Park, 2011), which may be regarded as a form of organisational citizenship behaviour. As trust in the organisation and trust in co-workers were positively related, it can be expected that greater levels of trust in co-workers can result in a greater identification with (Ferres, Connell, & Travaglione, 2004) and trust in the organisation. Several studies have suggested that trust in one’s co-workers can be significantly linked to organisational citizenship behaviour (Dar, 2010; Settoon & Mossholder, 2002).
Contrary to studies that have found a positive relationship between trust in the supervisor and organisational citizenship behaviour (Colquitt, Scott, & LePine, 2007; Goodwin, Whittington, Murray, & Nichols, 2011), the results of the present study indicate an insignificant relationship between these constructs. A possible explanation for this may be that health care employees do not necessarily work closely with management. This is especially prevalent in the nursing profession. According to Goldblatt, Granot, Admi, and Drach-Zahavy (2008), a shift leader - who is not regarded as a ‘manager’, but rather as a co-worker - is chosen to take responsibility for shifts. This was also supported by S. Scholtz (personal communication, October 7, 2015). Consequently, when the employees completed the questionnaires, they might have regarded the shift leader as a co-worker rather than a supervisor, resulting in an insignificant relation between trust in the supervisor and organisational citizenship behaviour. A more prominent supervisor and/or shift leader may improve organisational citizenship behaviours.

Based on the results, authentic leadership was not found to be a significant predictor of organisational citizenship behaviour. This contradicts previous research as Dannhauser (2007) mentions that followers are likely to reciprocate their leader’s supportiveness by engaging in extra-role behaviours. Other research findings have also contradicted the current findings (Piccolo, Greenbaum, Den Hartog, & Folger, 2010; Tapara, 2011; Xiong & Fang, 2014). In considering the current sample, it might be expected that, as public health care employees are in a helping profession, their engagement in extra-role behaviours might not be influenced by leadership practices, but rather by a willingness to help patients and save lives irrespective of whether effective leadership practices are in place. As the public health care sector is being faced with many challenges (George et al., 2013), the positive organisational culture - as stipulated in the conceptualisation of authentic leadership - might not be true for this industry at present (Stander et al., 2015). As a result, employees might not have regarded authentic leadership as an important contributor to their willingness to perform extra-role behaviours.

The findings of the study indicate that authentic leadership had a significant indirect effect on organisational citizenship behaviour via both trust in the organisation and trust in co-workers. However, authentic leadership did not significantly influence organisational citizenship behaviour via trust in the immediate supervisor. As a result, authentic leadership influences trust in the organisation and trust in co-workers, which then influence employees’
willingness to exert additional effort. Previous studies have found that trust generally mediates the relationship between employee attitudes and/or behaviours (Clapp-Smith et al., 2009; Hassan & Ahmed, 2011). As such, it is possible for trust to indirectly affect the relationship between authentic leadership and other follower outcomes as well (Errazquin, 2013). Studies have specifically found that the three trust referents may serve as separate mediators, namely trust in the organisation (Aryee et al., 2002; Chen, Aryee, & Lee, 2005; Tan & Lim, 2009), trust in the supervisor (Aryee et al., 2002), and trust in co-workers (Dar, 2010). A possible explanation of why trust in the immediate supervisor might not have played a role in this relationship might be attributed to the fact that managers do not work closely with helping professionals and do not work shifts. Instead, a shift leader (in the form of a co-worker) is appointed for different shifts (Goodwin et al., 2011). The employees thus perceive this shift leader as a co-worker rather than a manager.

These findings are in line with the Social Exchange Theory (SET); fair treatment of others leads to a reciprocal exchange which can facilitate positive individual and/or organisational outcomes (Aryee et al., 2002; Blau, 1964). Perceiving a leader as authentic can thus result in perceptions of the organisation and co-workers as being trustworthy, resulting in additional effort being exerted. In this regard, open, trusting, and transparent relationships between the leader and subordinates might enhance consistency between perceptions of the organisation and the organisation’s “actions” (due to the leader being a representative of the organisation). The leader may also, through role modelling and personal identification, encourage transparent relationships between co-workers (Avolio et al., 2004), enhancing consistency between perceptions of the co-workers and the co-workers’ “actions”. Employees who believe that they are treated fairly and are supported by their organisation and co-workers are more likely to do more work than expected of them; reciprocating the support they receive.

Based on the fact that only trust in the organisation and trust in co-workers indirectly affected organisational citizenship behaviour, the same reasoning applies with regard to the perception of a shift leader as a co-worker instead of a manager (Goldblatt et al., 2008). Trust in the organisation’s indirect effect on the relationship between authentic leadership and organisational citizenship behaviour might be due to the fact that employees working in health care are likely to identify with their organisation as it focuses on helping others. Another possible explanation is that employees who believe that they are treated fairly and
are supported by their organisation and co-workers are more likely to do more work than expected of them, reciprocating the support they receive.

Finally, the results indicated that trust in the organisation had a stronger indirect effect on the relationship between authentic leadership and organisational citizenship behaviour. This might indicate that if employees trust their organisation to recognise their work and to reward them for their skills and abilities (Ferres, 2003), they might be likely to work harder than what is expected of them in the hope that the organisation will recognise this. Trust in the organisation also focuses on the employees’ belief in the organisation to be sustainable and effective (Ferres & Travaglione, 2003). This might indicate that employees are willing to exert extra effort to contribute to the viability and success of the organisation. If employees feel that their organisation cares for them and recognises their efforts, they will be more willing to go the “extra mile” irrespective of the challenges they are faced with in this sector (Avolio et al., 2004; Stander et al., 2015).

Limitations and Recommendations for Future Studies

The study had several limitations which should be taken into consideration when interpreting the current results. Firstly, the study was cross-sectional in nature meaning data was collected at a single point in time. Although causal inferences cannot be made about the constructs, it may be possible that reciprocal relationships may exist, but that they are not captured in cross-sectional designs (Levin, 2006). In future, the constructs may be used for longitudinal studies to determine authentic leadership’s influence on workplace trust and organisational citizenship behaviour and vice versa.

The questionnaires used were self-report measures which might result in common method variance where correlations between predictors and outcomes are magnified when only a single data source is used (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Richardson, Simmering, & Sturman, 2009). A future recommendation is to use multi-source data such as in-depth interviews. As the questionnaires were administered in English, the participants could have experienced difficulties in interpreting or understanding the questions. This is relevant to participants whose first language might not be English. A recommendation for future research is that the questionnaires be translated into other South African languages.
This study was only limited to the public health care sector’s employees in a selected district in South Africa. A recommendation for future research is to conduct the study on employees in the private health care sector as well to facilitate comparative studies. Future studies can further benefit by utilising different samples in order to determine if these factor structures and relationships are unique to this sample or whether they can be generalised. Additionally, employees from all functions in the public health care sector were included in the sample, ranging from administrative staff to specialists. The rationale behind the inclusion of the entire workforce was to gain an overall perspective of this sector. However, for future studies, a more focused approach may be used where only a specific target group is focused on.

Theoretical limitations of the study can include the fact that authentic leadership was measured from the subordinates’ perspective and does not indicate the degree of authentic leadership present in the organisation. According to Ford and Harding (2011), the conceptualisation of authentic leadership as a positive form of leadership may be defective as they argue that authentic leaders lose their subjectivity. The loss of subjectivity might result in inauthenticity which might cause harm to the followers (Ford & Harding, 2011). The formulation and operationalisation of organisational citizenship behaviour are also cause for concern as items only measure behaviour towards the organisation and colleagues. The conceptualisation thus differs from the five-dimensional conceptualisation of organisational citizenship behaviour that is commonly used, which include the following dimensions: (1) altruism; (2) courtesy; (3) conscientiousness; (4) sportsmanship; and (5) civic virtue (e.g. Altuntas & Baykal, 2010; Ibrahim et al., 2013; Mathumbu & Dodd, 2013). Recent studies have also conceptualised organisational citizenship behaviour differently. Bester et al. (2015) operationalise organisational citizenship behaviour according to five dimensions, including a) advocacy participation; b) deviant behaviour; c) functional participation; d) loyalty; and e) social participation. They used Van Dyne, Graham, and Dienesch’s (1994) questionnaire to determine the strength of employees’ organisational citizenship behaviour. Michel and Tews (2015) focused on organisational citizenship behaviour as consisting of interpersonal helping and taking initiative. No consensus has been reached on the conceptualisation of organisational citizenship behaviour and the different dimensions comprising its complicated measurement. Workplace trust in its three referents may also be used as a moderator (Dannhauser, 2007), instead of a mediator.
Finally, two of the measuring instruments in the current study (ALI and WTS) have not been developed for the South African context. This may provide a possible explanation for the poor model fit of some of the scales that necessitated model improvement strategies (e.g. deleting items, correlating error variances and specifying constructs as unidimensional). A recommendation for future research is to conduct validation studies for both these measuring instruments. Convenience sampling was utilised, which might influence the generalisability of the findings. For future research, another sampling method can be used to select research participants.

**Implications for Management**

Authentic leadership, workplace trust and organisational citizenship behaviour play a critical role in the public health care sector. The lack of resources, staff shortages, distrust in leadership, and financial constraints of public health care institutions are likely to decrease public health care employees’ willingness to trust in the organisation, supervisors, and co-workers; thereby negatively influencing their willingness to go the “extra mile”. This is important as research has found that if helping behaviours such as organisational citizenship behaviour in health care are encouraged, employees and organisations are more likely to be more productive and flourish (Gilbert, Laschinger, & Leiter, 2010). This can have a positive impact on the reputation of public health care facilities. Public health care leaders and management can strive to develop innovative interventions to promote positive employee attitudes and behaviours (Gilbert et al., 2010) in order to facilitate trust and to enable organisations and employees to remain viable in delivering quality health care services.

The development of authentic leadership is an important aspect in public health care institutions as it may influence employees’ willingness to engage in organisational citizenship behaviour through trust in the organisation and trust in co-workers. Leadership development interventions may be conducted to improve managerial skills such as establishing mutually beneficial exchange relationships with employees and building trust (Davies, Wong, & Laschinger, 2011). In addition, the four factors of authentic leadership (self-awareness, relational transparency, balanced processing, and an internalised moral perspective) can be developed as part of a leadership development programme. These factors can also be advanced by developing leaders’ emotional intelligence and by means of coaching. Interventions can further be structured to allow managers to work more closely with
employees and to be more authentic in their actions, subsequently resulting in trusting behaviours and, eventually, organisational citizenship behaviour. Other possible interventions to enhance trust in the organisation and trust in the co-worker are to engage in team building exercises and creating a more reliable organisational climate. This climate can be created by empowering employees to take part in decision making, openly sharing information, and being ethical. These are all characteristics of the authentic leader.

With the exception of leadership development, other interventions can also be proposed to particularly enhance trust in the organisation and trust in co-workers. With regard to trust in the organisation, management and executives as representatives of the organisation can be more value-driven and subsequently live according to organisational values. The organisational climate can also be influenced by developing interventions aimed at enhancing fair organisational processes and creating a supporting work environment. Trust in the organisation can be enhanced by focusing on team building interventions and/or team development where the core focus should be to first get to know one another.

Conclusion

The results of this study support the imperative role of authentic leadership and workplace trust in explaining organisational citizenship behaviour. Although authentic leadership did not directly influence organisational citizenship behaviour, authentic leadership still influenced organisational citizenship behaviour indirectly via trust. In addition, the results indicate that both trust in the organisation and trust in the co-worker played a role in authentic leadership’s indirect effect on organisational citizenship behaviour. Trust in the organisation made the most significant impact. These findings indicate that in order to get employees to go the “extra mile”, leaders need to display genuineness which results in greater employee identification with the organisation, which is regarded as an employee value proposition, and a greater degree of trust in their co-workers.
References


CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to present the conclusions of the current study according to its general and specific objectives. In addition, the limitations of the study are discussed and recommendations are made both for the organisation and for future research.

3.1 Conclusions

The general aim of this research was to explore the influence of authentic leadership on workplace trust and organisational citizenship behaviour. The focus was on the indirect effects of authentic leadership on organisational citizenship behaviour via trust. Based on the literature study as well as the empirical results, the following conclusions can be drawn.

The first objective was to investigate the relationship between authentic leadership, workplace trust, and organisational citizenship behaviour as conceptualised in literature. Trust can be regarded as an outcome of authentic leadership (Clapp-Smith, Vogelsang, & Avey, 2009; Datta, 2015; Errazquin, 2013) and as an antecedent of organisational citizenship behaviour (Altuntas & Baykal, 2010; Chen, Wang, Chang, & Hu, 2008). Accordingly, authentic leadership can also be considered as a forerunner of organisational citizenship behaviour (Pues, Wesche, Streicher, Braun, & Frey, 2012).

Authentic leadership is considered as the core construct underlying positive types of leadership (Avolio & Gardner, 2005; Rego, Sousa, Marques, & Cunha, 2012) and may facilitate the creation of work environments that encourage quality care, especially among nurses (Bamford, Wong, & Laschinger, 2013). Authentic leaders do this by building credibility, trust, and respect which allows followers to view them as authentic (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Bamford et al., 2013). Authentic leadership was conceptualised as focusing on positive capacities in a leader as well as a mature and positive organisational context and/or culture (Luthans & Avolio, 2003; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Authentic leadership was operationalised as consisting of four dimensions, namely self-awareness, balanced processing, relational
transparency, and possessing an internalised moral perspective (Avolio & Gardner, 2005; Walumbwa et al., 2008).

According to Schlechter and Strauss (2008), effective leadership is a prerequisite for trust and its role in trust cannot be underestimated (James, 2011). Studies have found that trust in business leaders is decreasing due to unethical actions and business failures (Beddoes-Jones & Swailes, 2015; Du Plessis, Wakelin, & Nel, 2015; Pues et al., 2012). Schoeman (2012) added to this by arguing that trust among co-workers is diminishing in organisations as well. A study conducted in South Africa found that nurses in the public health care sector have less trust in management to resolve patient problems than nurses in the private health care sector (Coetzee, Klopper, Ellis, & Aiken, 2013). Limited research exists regarding the perceptions of other employees in the public health care sector, especially in South Africa.

The Social Exchange Theory (SET) focuses on reciprocity (Cropanzano & Mitchell, 2005), and rests on the premise that employees are likely to reciprocate if they are treated fairly by their organisation, managers and/or co-workers. The building block of social exchange can be seen as trust (Hassan & Ahmed, 2011). As a result, trust can be regarded as a central component in the leader-member exchange relationship (Hsieh & Wang, 2015). Previous studies have regarded authentic leadership as a prerequisite of trust (Wang & Hsieh, 2013; Wong & Cummings, 2009). Health care systems are interactive and relational, allowing subordinates to identify with their organisation as well as their supervisors (Avolio & Walumbwa, 2014; Gilson, 2003). Accordingly, subordinates might also identify with one another (Avolio & Walumbwa, 2014). Therefore, being an effective leader is about winning employees’ trust (Wang & Hsieh, 2013). The determinants of whether or not supervisors are trusted by their subordinates include integrity, empathy, and professional competence (Colquitt, Scott, & LePine, 2007). According to Luthans, Norman, and Hughes (2006), leader openness is perceived as a precursor of trust which may be linked to the relational transparency component in authentic leadership.

The conceptualisation of trust rests on its three referents (organisation, supervisor, and co-worker). As denoted by Ferres (2003), workplace trust can be defined as the individual’s perceptions of consistency in terms of a trust referent and the actions associated with these perceptions. The operationalisation of trust in the organisation is centred on open communication, organisational support, and organisational justice or fairness (Ferres, 2003).
These elements rest on the proposition that the employee trusts the organisation to be honest, reliable and to maintain effective organisational processes (Galford & Drapeau, 2003; James, 2011). In this regard, the manager may be seen as a representative of the organisation (O’Reilly, Caldwell, Chatman, Lapiz, & Self, 2010) who possesses organisational authority (Treviño & Brown, 2004). Accordingly, trust in the immediate supervisor is elicited if supervisors and/or managers listen to subordinates’ inputs and appreciate these subordinates’ efforts (Ferres & Travaglione, 2003). Finally, trust in co-worker focuses on supporting colleagues and having authentic interactions among one another, characterised by transparency and openness (Ferres, 2003; Mazutis & Slawinski, 2007).

According to Ferres (2003), trust can facilitate various positive individual and organisational outcomes. Schoeman (2012) considers trust as an important factor in the workplace as it contributes to organisational effectiveness. Other authors have found that trust (whether in general or according to its three referents) plays a crucial role in organisational citizenship behaviour (Altuntas & Baykal, 2010; Paille & Bourdeau, 2010; Wong, Ngo, & Wong, 2006; Wong, Wong, & Ngo, 2012) as it encourages employees to go the “extra mile”. According to Diedericks (2012), going the “extra mile” may enhance organisational effectiveness.

The concept of organisational citizenship behaviour was introduced by Bateman and Organ in 1983 (Belogolovsky & Somech, 2010; Chalal & Mehta, 2010). Al-Sharafi and Rajiani (2013) have mentioned that organisational citizenship behaviour has a positive impact on many aspects of the organisation. These include performance, customer satisfaction, and profitability. In its conceptualisation, organisational citizenship behaviour can be defined as the unrestricted behaviour of employees which facilitates organisational effectiveness (Bester, Stander, & Van Zyl, 2015; Organ, 1997). Organisational citizenship behaviour consists of two dimensions, namely a) interpersonal orientation which refers to a willingness to assist co-workers; and b) organisational orientation which refers to a willingness to assist the organisation (Diedericks, 2012; Organ & Paine, 1999; Rothmann, 2010).

Leaders are considered as the main influencers of their subordinates’ behaviour and can play a vital role in the organisational citizenship behaviours of these subordinates (Al-Sharafi & Rajiani, 2013; Chalal & Mehta, 2010). Evidently, leadership can be regarded as an important component in organisational citizenship behaviour (Gilson & Daire, 2011; Okanga & Drotskie, 2015). Previous studies have found authentic leadership to be a predictor of
organisational citizenship behaviour (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Pues et al., 2012). No empirical evidence could be found of the indirect effects of authentic leadership on organisational citizenship behaviour via trust. However, previous studies have included trust as a mediator, but they nonetheless focused on either authentic leadership or organisational citizenship behaviour, and not both (Errazquin, 2013; Pues et al., 2012; Wong & Cummings, 2009).

The second objective was to determine the influence of perceived authentic leadership on workplace trust and organisational citizenship behaviour amongst employees in the public health care sector in South Africa. Structural equation modelling indicated that authentic leadership was a significant positive predictor of workplace trust in its three referents. This included a) trust in the organisation ($\beta = 0.60, p < 0.01$); b) trust in the immediate supervisor ($\beta = 0.82, p < 0.01$); and c) trust in co-worker ($\beta = 0.48, p < 0.01$). Authentic leadership was not a significant predictor of organisational citizenship behaviour. Workplace trust in two of its three referents was a significant positive predictor of organisational citizenship behaviour. Both trust in the organisation ($\beta = 0.28, p < 0.01$) and trust in co-worker ($\beta = 0.22, p < 0.05$) were significant positive predictors of organisational citizenship behaviour, but trust in the immediate supervisor ($\beta = -0.02, p = 0.81$) was a negative, insignificant predictor of organisational citizenship behaviour. This can indicate that a leader who is objective, open, genuine, and self-aware is likely to create an environment a) in which information is shared openly; b) that is perceived as being fair; c) that recognises employees’ efforts and abilities; and c) that supports employees. This environment may succeed in facilitating trusting behaviours in and among employees.

The third objective was to investigate whether workplace trust indirectly affects the relationship between authentic leadership and organisational citizenship behaviour. Based on the indirect effects, authentic leadership had a significant indirect effect on organisational citizenship behaviour via both trust in the organisation ($\beta = 0.17, p < 0.01, 95\% \text{ CI } [0.06, 0.29]$) and trust in co-worker ($\beta = 0.11, p < 0.05, 95\% \text{ CI } [0.02, 0.20]$). This finding indicates that authentic leadership influences trust in the organisation and trust in co-workers, which then contributes to organisational citizenship behaviour. However, trust in the immediate supervisor did not indirectly affect the relationship between authentic leadership and organisational citizenship behaviour. Trust in the immediate supervisor did not play a role as managers in public health care institutions have different working hours than helping
professionals and other support staff. As a replacement for a manager during a work shift, shift leaders are selected to act as a supervisor during the shift (Goodwin, Whittington, Murray, & Nichols, 2011). This shift manager is a co-worker and employees might perceive this leader as a co-worker rather than a manager.

The fourth objective was to determine if there is a difference in the indirect effects of the workplace trust referents in the relationship between authentic leadership and organisational citizenship behaviour. Trust in the organisation had a stronger indirect effect on the relationship between authentic leadership and organisational citizenship behaviour than co-worker trust. Trust in the organisation had a medium indirect effect ($\beta = 0.17, p < 0.01, K^2 = 0.21$) and co-worker trust a small indirect effect ($\beta = 0.11, p < 0.05, K^2 = 0.14$). This means that employees might place more worth on how their organisation values their efforts rather than how co-workers value their efforts. Employees might feel more inclined to go the “extra mile” if they trust in their organisations to recognise and reward these efforts. As a result, employees are likely to feel that they contribute to the organisation’s sustainability if they engage in extra-role behaviours, hence their organisations can reciprocate more than their co-workers in their additional efforts.

3.2 Limitations

The study had several limitations which should be taken into consideration when interpreting the current results.

The most restrictive factor in the current study was the cross-sectional design as causal inferences could not be made about the relationships between the constructs. The possibility exists that reciprocal relationships may be present; something which is not taken into consideration in cross-sectional designs (Levin, 2006). Consequently, reversed causation between variables may occur as trust may influence leadership practices (Beddoes-Swailes & Jones, 2015; Du Plessis et al., 2015). However, the hypotheses are in line with theory and empirical findings from previous studies.

Self-report measures were used to gain information from the participants regarding the predictor and outcome variables. Common method variance might be a consequence as correlations between variables are exaggerated when a single source of data is used.
(Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Richardson, Simmering, & Sturman, 2009). However, common method variance is seldom strong enough to nullify findings (Johnson, Rosen, & Djurdjevic, 2011). The perceptions of the participants regarding authentic leadership, workplace trust, and organisational citizenship behaviour were evaluated and self-report measures were believed to be appropriate. The self-report measures were only in English, which might have influenced the participants’ understanding of the items for only 6.6% of the sample indicated that their first language is English. However, this was combatted by making English literacy a requirement before being included in the study.

The study was limited to the public health care sector which is not the only means of obtaining health care in South Africa. Furthermore, the sample comprised employees from all functions in the public health care sector, including medical staff and support staff. This was done to gain an overall perspective of these employees’ experiences in their current organisations. The geographic constraint of the population might result in certain limitations influencing the generalisability of the findings. Another factor that might influence the generalisability of the findings is that a convenience sampling method was used. The geographic location could have played a role in the factor structure of the variables as well as the findings.

The theoretical limitations of the current study are outlined as follows. The actual levels of authentic leadership in the current organisation were not measured. The focus was rather on whether or not the employees perceive management as being authentic. Ford and Harding (2011) found that the conceptualisation of authentic leadership might be flawed, especially when it is regarded as a positive form of leadership. Their reasoning is that in being authentic and objective, authentic leaders are likely to lose their subjectivity. A lack of subjectivity may lead to inauthenticity, which might negatively influence subordinates (Ford & Harding, 2011).

In this study, organisational citizenship behaviour was operationalised as consisting of two dimensions, namely a) a willingness to assist co-workers; and b) a willingness to assist the organisation. The formulation of organisational citizenship behaviour in this manner might be a cause for concern as items only relate to assisting co-workers and assisting the organisation. In focusing on organisational citizenship behaviour in this regard, it is then logical that both trust in the organisation and trust in co-workers will be associated with the organisational
citizenship behaviour items. Another possible limitation is that the conceptualisation of organisational citizenship in the current study differs from the commonly used five-dimensional conceptualisation of organisational citizenship behaviour. The five-dimensional conceptualisation includes the following dimensions: (1) altruism; (2) courtesy; (3) conscientiousness; (4) sportsmanship; and (5) civic virtue (e.g. Altuntas & Baykal, 2010; Ibrahim, Ghani, & Salleh, 2013; Mathumbu & Dodd, 2013).

Finally, both the Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011) and the Workplace Trust Survey (WTS; Ferres, 2003) were not developed in South Africa and their psychometric properties have not been investigated thoroughly which might influence the findings.

3.3 Recommendations

Despite the above mentioned limitations, the study has important implications for future research as well as practice.

3.3.1 Recommendations for Future Research

In order to combat the limitations of a cross-sectional design, the relationships in the current study may be tested with longitudinal designs to determine authentic leadership’s influence on workplace trust and organisational citizenship behaviour and vice versa. As common method variance might pose a challenge in the current study, Chang, Van Witteloostuijn, and Van Eeden (2010) propose different approaches which can be used to combat this, such as making sure that the variables are measured during empirical research. This may include obtaining objective data such as performance or similar ratings which may complement the subjective data collected by means of the surveys (Chang et al., 2010; Stander, De Beer, & Stander, 2015). Multi-source data such as in-depth interviews can also be used to gather information about the participants.

In order to facilitate a better understanding of the items in future, the questionnaires may be translated into other South African languages as well. In future, validation studies can also be conducted in a South African context with regard to the ALI and OCBS. As the sample consisted of employees from all functions in the public health care sector, a possible
recommendation is to focus on a specific target group for a more focused approach. The future focus can be only on nurses or administration staff for example.

In future, studies can be done with larger or different samples from a broader geographic area in order to determine the generalisability of the findings with regard to factor structures and correlations or predictions. Trust can also be included as a moderator instead of a mediator in future (Dannhauser, 2007). This study can also be replicated to determine whether it will produce different results due to circumstantial differences. In order to facilitate comparative studies, a similar study can be conducted on private health care employees.

In future studies, organisational citizenship behaviour can be conceptualised according to how other authors measured it. Bester et al. (2015) included five dimensions in their conceptualisation of organisational citizenship behaviour which include advocacy participation, deviant behaviour, functional participation, loyalty, and social participation. This is in line with Van Dyne, Graham, and Diensch’s (1994) questionnaire. Other authors, Michel and Tews (2015), operationalised organisational citizenship behaviour as a form of interpersonal helping and as taking initiative.

3.3.2 Recommendations for Practice

The findings of the current study can be used to create an awareness which can facilitate the individual employees’ understanding of how their perceptions can influence their willingness to trust in the organisation, supervisor, and co-workers. Subsequently, employees can also understand how their willingness to trust can facilitate the additional efforts that they engage in. These employees need to understand that how they view their leader influences their trusting behaviours and also their willingness to go the “extra mile”. The findings may also assist in the selection and development of leaders.

As the perceptions of public health care institutions are wavering, these institutions are faced with the challenge of improving the perceptions that health care users hold of them (Gilson & McIntyre, 2007). These perceptions may be improved by health care employees’ willingness to exert additional effort on behalf of the organisation. Engaging in organisational citizenship behaviour may subsequently result in improved performance and customer satisfaction (Al-Sharafi & Rajiani, 2013). If authentic leadership’s indirect effects on organisational
citizenship behaviour through workplace trust are understood, these institutions can implement interventions that will facilitate these behaviours. These interventions can take the form of awareness campaigns and evidence-based interventions which can be prioritised according to the differences in strength of the indirect effects based on the trust referents.

3.4 Chapter Summary

In this chapter, conclusions with regard to the theoretical and empirical objectives were drawn. In addition, the limitations of the study were discussed and recommendations were made for future research as well as for practice.
References


