Authentic leadership, organisational citizenship behaviour and intention to leave: The role of psychological capital

Orientation: The orientation of the study was towards psychological capital (PsyCap) as a mediator of the influence authentic leadership (AL) has on organisational citizenship behaviour (OCB) and intention to leave.

Research purpose: This study aimed to investigate the influence of AL on OCB and intention to leave through PsyCap amongst public healthcare employees in South Africa.

Motivation for the study: South African public healthcare needs effective leadership that is value based, transparent, supportive and exemplary in behaviour to be efficient and to provide quality service. By exploring the impact of AL and the process through which such a leader influences followers, the study sought to demonstrate that AL may be effective in achieving valued outcomes in the healthcare sector.

Research approach/design and method: A quantitative, non-experimental, cross-sectional survey was used. A sample of 633 public healthcare employees was included in the study. Measuring instruments included the Authentic Leadership Inventory, a shortened version of the Psychological Capital Questionnaire, Organisational Citizenship Behaviour Scale and the PSYCONES’ Intention to Leave Scale. Structural equation modelling was performed to evaluate the hypothesised measurement and structural models by using Mplus.

Main findings: Results indicated that employees’ perceptions of their leaders as authentic has an effect on OCB and intention to leave through PsyCap.

Practical/managerial implications: Organisations should implement leadership development programmes that are relationally focussed and should strive to develop employees’ PsyCap.

Contribution/value-add: Providing more insight into the influence of authentic leadership on follower organisational citizenship behaviour and intent to leave as well as the role that psychological capital plays in these relationships.

Keywords: authentic leadership; psychological capital; organisational citizenship behaviour; intention to leave; public healthcare.

Introduction

The Coronavirus disease 2019 (COVID-19) pandemic and its associated health, social and economic consequences placed a renewed focus on healthcare. Although the South African Department of Health (DoH) has set out to improve the status of public healthcare services (Gilson & Daire, 2011; World Health Organization [WHO], 2013), healthcare institutions remain hampered by inequitable distribution of resources (Health Systems Trust, 2018). In addition to a lack of resources, public healthcare employees are burdened with staff shortages, high workloads and long working hours (Health Systems Trust, 2018; Maphumulo & Bhengu, 2019), even more so during pandemics. These burdens result from high turnover rates in an overstretched public healthcare sector (Lee, Chiang, & Kuo, 2019; Trinchero, Borgonovi, & Farr-Wharton, 2014), which may threaten both the quality of healthcare services (Lee et al., 2019) and the achievement of the DoH’s goals. Despite the challenges encountered in this sector, public healthcare employees are expected to ‘go the extra mile’.

Resources, both in the workplace and within the individual, may help public healthcare employees deal with the challenges in their work environment and perform optimally (Van Veldhoven et al., 2020). Leadership, as a job resource, is regarded as one of the main building blocks of an efficient health system (Shisana, 2018). More specifically, authentic leadership (AL) has the potential to...
influence public healthcare employees’ behaviours positively (see Aliyyani, Wong, & Cummings, 2018; Malila, Lunukka, & Suhohben, 2018 for reviews). Leaders who are transparent about their intentions, who are value based and who lead others towards achieving organisational goals through their exemplary behaviour are authentic leaders (Avolio & Walumbwa, 2014). Ineffective leadership has been a prevailing problem in South African public healthcare (Doherty, Gilson, & Shung-King, 2018), and public healthcare employees may benefit from having leaders who are genuine, who are not influenced by external pressures and who motivate subordinates to perform.

Job resources also have the potential to activate personal resources (Van Veldhoven et al., 2020). One such personal resource, psychological capital (PsyCap), is of particular importance because it can assist healthcare employees in reaching performance outcomes (Laschinger & Fida, 2014a; Youssef-Morgan & Petersen, 2019), do more than what is expected (Beal, Stavros, & Cole, 2013) and stay with the organisation (Celik, 2018). Kim, Kim, Newman, Ferris and Perrewé (2019, p. 110) conceptualise PsyCap as ‘the development of the actual self into the possible self’ and postulate that synergy between human, social and PsyCap is central for actualising human potential in the present workplace. Public healthcare services can benefit from employees engaging in organisational citizenship behaviours (OCBs), as these behaviours encourage employees to do more with fewer resources (Koberg, Boss, Goodman, Boss, & Monsen, 2005).

Besides leadership and personal resources, employees’ attitudes towards their work also matter for performance (Avey, Reichard, Luthans, & Mhatre, 2011). One particular attitude of interest is their intention to leave (ITL). Intention to leave refers to an employee’s intention to leave the organisation or job as for a variety of reasons (De Simone, Planta, & Cicotto, 2018). If employees display high levels of PsyCap, they can persevere in a challenging work environment, reducing their intention to leave the organisation (Gupta & Shaheen, 2017; Hayes et al., 2012).

Employees can thus draw on their psychological capacities (i.e., PsyCap) to enhance positive outcomes such as OCB (Beal et al., 2013) and to minimise negative outcomes such as ITL (Fallatah, Laschinger, & Read, 2017; Laschinger et al., 2016). However, leadership is also important as authentic leaders positively influence followers’ PsyCap (Amunkete & Rothmann, 2015).

A review of AL studies highlights two limitations: studies are limited in both number and scope (Aliyyani et al., 2018; Malila et al., 2018). Only two studies (i.e. Coxen, Van der Vaart, & Stander, 2016; Stander, De Beer, & Stander, 2015) were conducted in the South African context, but neither focussed on the (in)direct role of AL on positive and negative employee outcomes (i.e. OCB and ITL) through PsyCap. This is unfortunate, not only because of the assumed importance of AL, PsyCap, OCB and low levels of ITL in an already constrained system, but also because results from studies in other contexts cannot be extrapolated haphazardly.

Recent literature indicates that job resources may not be equally beneficial for all, and more research is needed to understand when, why and for whom these resources may be helpful (Van Veldhoven et al., 2020). Existing literature also indicates that findings relating to the outcomes of PsyCap are not necessarily consistent across contexts and that it may be more influential in the United States of America than in other countries (Luthans & Youssef-Morgan, 2017). Hence, more information is needed regarding the impact of authentic leaders on followers’ OCB and ITL as well as the mechanisms through which AL exerts its influence. The current study aimed to fill this gap by investigating the influence of AL on OCB and ITL and the role that PsyCap plays in these relationships.

Literature review

Authentic leadership

The AL framework draws from the concept of authenticity (Avolio & Gardner, 2005). Authenticity – as derived from an ancient Greek aphorism – refers to knowing the self and being true to the self (Avolio & Gardner, 2005). In this study, AL was conceptualised as (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008):

[A] pattern of leader behaviour that draws upon and promotes both positive psychological capacities and positive ethical climate, to foster greater self-awareness, an internalised moral perspective, balanced processing of information, and relational transparency on the part of the leaders working with followers, fostering positive self-development. (p. 94)

Authentic leadership is a higher-order construct that consists of four lower-order dimensions. Balanced processing constitutes a leader’s objectivity when analysing information for decision-making (Walumbwa et al., 2008), whereas possessing an internalised moral perspective is regulating one’s thoughts and actions through the guidance of one’s moral standards and values against other external factors (Neider & Schriesheim, 2011). Relational transparency relates to a leader’s openness and transparency during interactions with others (Avolio & Gardner, 2005). Finally, self-awareness refers to the self-knowledge of leaders and the extent to which they are aware of their characteristics (including strengths and areas of development) (Neider & Schriesheim, 2011; Walumbwa et al., 2008). In the current study, the extent to which leaders display AL behaviours was measured from the subordinates’ perspectives. In this study, a follower is regarded as the authentic leader’s subordinate.

Authentic leadership and psychological capital

Authentic leaders have a significant influence on their followers’ PsyCap levels (Amunkete & Rothmann, 2015; Wu & Nguyen, 2019). Derived from positive organisational behaviour (POB; Luthans, 2002), PsyCap concerns ‘who you are’ (the actual self) and ‘who you are becoming’ (your possible self)
Psychological capital refers to (Luthans, Avolio, Avey, & Norman, 2007):

... an individual’s positive psychological state of development characterised by (1) having the confidence to take on and put in the necessary effort to succeed at challenging tasks (self-efficacy); (2) making a positive attribution about succeeding now and in the future (optimism); (3) persevering toward goals, and when necessary, redirecting paths to goals in order to succeed (hope); and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (p. 10)

These four capacities are conceptually distinct from one another, state-like and work synergistically to facilitate positive outcomes (Luthans et al., 2007; Luthans & Youssef-Morgan, 2017).

In their early development of AL, Luthans and Avolio (2003) identified that PsyCap acts as a personal resource for the authentic leader. Therefore, authentic leaders draw from their own personal resources to contribute to their followers’ PsyCap (Wang, Sui, Luthans, Wang, & Wu, 2014), allowing for positive outcomes (Luthans et al., 2007; Luthans & Avolio, 2003). For instance, an authentic leader is able to encourage open collaborative relationships that provide feedback and input for growth, providing followers with the confidence to bounce back from setbacks and improve on their work and the ability to keep a positive outlook and create alternative options in reaching their goals (Luthans, Youssef-Morgan, & Avolio, 2015). Empirical research supports AL’s positive association with followers’ PsyCap (Alilyyani et al., 2018; Amunkete & Rothmann, 2015; Du Plessis, 2014; Malila et al., 2018):

H1: Perceived AL associates positively with follower PsyCap.

Authentic leadership and organisational citizenship behaviour

Organisational citizenship behavior became relevant across diverse industries and organisations as a result of employees being required to do more with fewer resources (Perreira & Berta, 2016; Podsakoff, Podsakoff, Mackenzie, Maynes, & Spoolme, 2014). Daniel Katz identified three types of behaviours that can contribute to the effectiveness of the organisation (Selamat, Nordin, & Fook, 2017). The first behaviour is that people must enter and be part of a system where they remain in the system; the second behaviour requires people to legitimately carry out their in-role duties; and the third behaviour involves employees going beyond their expected roles in carrying out their work innovatively and spontaneously to achieve the organisational objectives (Bolon, 1997; Selamat et al., 2017). The latter behaviour led to the establishment of OCB (Smith, Organ, & Near, 1983).

Organ (1988, p. 4) defined OCB as ‘individual behaviours that are discretionary, not directly or explicitly recognised by the formal reward system and in the end promotes the functioning of the organisation’. He later refined this definition to ‘contributions to the maintenance and enhancement of the social and psychological context that supports task performance’ (Organ, 1997, p. 91). According to Barrett (2018), OCB refers to behaviour: (1) that goes beyond formal work requirements, (2) that is spontaneous and not enforced by an organisation and (3) that is voluntarily performed. In this study, OCB is conceptualised as (1) employees’ willingness to assist co-workers by going beyond what is expected (interpersonal orientation) and (2) employees’ willingness to exert extra effort to help the organisation (organisational orientation) (Rothmann, 2010).

These two dimensions of OCB are aligned to Smith et al.’s (1983) descriptions of altruism and generalised compliance. Altruism refers to behaviour that seeks to help a specific person, such as voluntarily assisting with tasks that are not required, showing courtesy to a colleague by helping when they are absent or going out of one’s way to include new colleagues into the group (Smith et al., 1983). Generalised compliance refers to impersonal behaviours of compliance to an organisation’s norm of what constitutes a good employee, for instance, being punctual, offering ideas that are good for the organisation or defending the organisation (Smith et al., 1983).

An authentic leader’s influence on follower outcomes is an integral part of the AL theoretical framework (Walumbwa et al., 2008). Meta-analytical studies posit that perceived AL accounts for variance in follower OCB, based on the leader’s key behaviours that influence followers to identify themselves with the leader, which in turn elicits higher citizenship behaviours (Valsania, Léon, Alosno, & Cantisano, 2012; Walumbwa et al., 2008). The variance in follower OCB, explained by AL, is expounded by the increased levels of trust, hope, positive emotions and optimism amongst followers (Ilies, Morgeson, & Nahrgang, 2005). Authentic leaders can empower followers to make positive changes by improving on their job performance and going beyond expectations (Alilyyani et al., 2018; Malila et al., 2018). In sum, AL is a critical factor in eliciting the OCB of followers (Valsania et al., 2012):

H2: Perceived AL associates positively with follower OCB.

Authentic leadership and intention to leave

Intention to leave is a conscious and well-thought-through decision to leave the organisation (Tett & Meyer, 1993), and it can be described as the last stage before the employee does leave the organisation (Griffeth, Hom, & Gaertner, 2000; Winterton, 2004). An individual on this level is either in a preparatory stage, where they are gathering available information about job opportunities, or they are actively searching for a job by sending out résumés (Griffeth et al., 2000). Research on turnover intention sought to discover predictors of ITL before the employee quits (Podsakoff, LePine, & LePine, 2007; Ritter, 2011). When evaluating the
determinants of ITL, one can distinguish between ‘push factors’ (i.e. those that will lead to employees leaving) and ‘pull factors’ (i.e. those encouraging employees to stay) (Sasso et al., 2019). Leadership and participation in hospital matters are important ‘pull factors’ (Sasso et al., 2019), as supportive leadership buffers job dissatisfaction experienced by employees (Laschinger & Fida, 2014b).

Authentic leaders help build healthy work environments through their availability and exemplary behaviours that are conducive to positive employee outcomes, for example, lowered intentions to leave the organisation (Blake, Leach, Robbins, Pike, & Needleman, 2013; Laschinger & Fida, 2014b). Empirical studies support the negative relations between AL and employees’ ITL (Fallatah et al., 2017; Laschinger et al., 2016; Munyaka, Boshoff, Pietersen, & Snelgarret, 2017):

H3: Perceived AL associates positively with follower ITL.

**Psychological capital, organisational citizenship behaviour and intention to leave**

Despite the importance of PsyCap in its own right, the organisational outcomes of PsyCap also matter. Corporate decision-makers need evidence-based information regarding the impact of PsyCap on the bottom line as well as on performance (Luthans & Youssuf-Morgan, 2017). Consequently, OCB (as a performance indicator) and ITL (which potentially impacts on performance and the bottom line) are essential outcome measures. Previous studies indicated that PsyCap has significant positive effects on individual, group and organisational outcomes (Du Plessis & Boshoff, 2018; Luthans & Youssuf-Morgan, 2017). More specifically, these studies indicate that PsyCap acts as a positive resource to enhance OCB (Newman, Ucbasaran, Zhu, & Hirst, 2014; Wang et al., 2014; Wu & Nguyen, 2019) and intention to stay with the organisation (Dhim & Arora, 2018; Maloney, Boxall, Parsons, & Cheung, 2018):

H4: PsyCap associates positively with OCB.

H5: PsyCap associates negatively with ITL.

**The indirect effects of psychological capital**

Using the job demands–resources (JD-R) theory, PsyCap is posited as a mechanism through which AL has an impact on OCB and ITL. The JD-R theory states that each job consists of job resources that play a motivational role in ensuring performance (Bakker & Demerouti, 2014, 2017). The JD-R theory also postulates that individuals possess intrapersonal resources that enable them to influence the environment (Hobfoll, Halbesleben, Neveu, & Westman, 2018) and that job resources activate personal resources (Van Veldhoven et al., 2020). Consequently, AL is seen as a job resource that can directly foster discretionary behaviours (i.e. OCB) whilst lowering employees’ ITL. It can also indirectly do so by activating personal resources (i.e. PsyCap) that help employees display positive discretionary behaviours and attitudes towards the organisation (Alilyyani et al., 2018; Wang et al., 2014). This is likely because PsyCap implies that individuals have the perception that they can influence their environments and that they can engage intentionally and autonomously when pursuing set goals. These individuals can also make positive attributions about future success even when confronted by challenges (Luthans & Youssuf-Morgan, 2017). Empirical research supports the mediating properties of PsyCap. For example, PsyCap mediates the relationship between AL and employee creativity (Rego, Sousa, Marques, & Cunha, 2012) and between AL, commitment and job performance (Woolley, Caza, & Levy, 2014):

H6: Perceived AL has an indirect effect on OCB through PsyCap.

H7: Perceived AL has an indirect effect on ITL through PsyCap.

Based on the above discussions, the hypothesised model can be depicted as follows (Figure 1).

**Research design**

**Research approach**

A quantitative, non-experimental, cross-sectional approach was used (Gravetter & Forzano, 2012) to explore relationships between the AL, PsyCap, OCB and ITL. Cross-sectional designs are often used to determine whether variables are related before investing resources in longitudinal studies (Spector, 2019).

**Research method**

**Research participants**

Surveys were disseminated to employees employed at hospitals and clinics in the Sedibeng District of the Gauteng Province. A total of 2000 employees were targeted by using non-probability convenient sampling, and 633 usable surveys were obtained. The majority of the participants were Black (87.9%), Sesotho-speaking (44%) females (79.6%). More than one-third of the participants were in possession of a diploma. Almost half of the employees had been employed in the same job for < 5 years (40.3%). Lastly, the mean age of the respondents was 42 years (standard deviation [SD] = 12.27).

**Measuring instruments**

Authentic leadership was measured by using the Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011) in
terms of follower (subordinate) perceptions of their leader’s self-awareness, balanced processing, relational transparency and moral perspective. The ALI contains 14 items, with self-awareness and relational transparency measured by three items each and balanced processing and moral perspective each measured by four items. Examples of each dimension are: ‘my leader describes accurately the way others view his or her abilities’ (self-awareness); ‘my leader asks for ideas that challenge his or her core beliefs’ (balanced processing); ‘my leader clearly states what he or she means (relational transparency)’; and ‘my leader shows consistency between his or her beliefs and actions’ (moral perspective). The items were measured on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). This study yielded a Cronbach’s alpha coefficient of 0.83 and a McDonald’s omega coefficient of 0.93.

Psychological capital was measured by using the shortened version of the Psychological Capital Questionnaire (PCQ; Avey et al., 2011) in terms of followers’ hope, resilience, optimism and self-efficacy. The scale comprises 12 items, and each construct is measured by three items. The items were measured on a six-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Examples of each scale are: ‘if I should find myself in a jam at work, I could think of many ways to get out of it’ (hope); ‘I can get through difficult times at work because I’ve experienced difficulty before’ (resilience); ‘I always look on the bright side of things regarding my job’ (optimism); and ‘I feel confident in representing my work area in meetings with management’ (self-efficacy). In this study, the PCQ showed a Cronbach’s alpha coefficient of 0.88 and a McDonald’s omega coefficient of 0.89, indicating an acceptable reliability.

Organisational citizenship behaviour was measured by the Organisational Citizenship Behaviour Scale (OCBS; Rothmann, 2010), which consists of two dimensions of OCB (assistance towards the individual and assistance towards the organisation). The questionnaire comprises six items, in which each dimension is measured by three items. The seven-point Likert-type response scale ranges from 1 (strongly disagree) to 7 (strongly agree). Examples of the items are: ‘I give up time to help co-workers who have work or non-work problems’ (behaviour at the individual level) and ‘I take action to protect the organisation from potential problems’ (behaviour at the organisational level). Both reliability indicators (Cronbach’s alpha and McDonald’s omega) showed an acceptable reliability of 0.79.

Intention to leave was measured by the Intention to Leave Scale, derived from the PSYCONES project (Guest, Isaksson, & De Witte, 2010). The scale contains four items. An example of an item is: ‘despite the obligations I have made to this organisation, I want to quit my job as soon as possible’. The items are scored on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). This study yielded a Cronbach’s alpha coefficient of 0.83 and a McDonald’s omega coefficient of 0.72, which shows an acceptable reliability.

Research procedure and ethical considerations

The study received ethical clearance from the ethics committee of the relevant university. Arrangements were made with the management of the participatory district hospitals and clinics to conduct the research and to obtain permission from participants. Paper-and-pencil questionnaires, consent forms and information letters were distributed to participants by the gatekeepers of each facility. These documents contained the objectives of the study and explained the voluntary nature of participation. Written informed consent was obtained, and anonymity as well as confidentiality were ensured. Participants could complete the questionnaires at their own pace. Participants were then required to submit the completed questionnaires in a secure box at each facility, whereafter the boxes were collected and kept safe.

Statistical analysis

Statistical analysis was performed with JASP Team (2019) as well as Mplus 8.4 (Muthén & Muthén, 1998–2018). Structural equation modelling was used. The first step was to evaluate the factor structure (i.e. construct validity) of the measuring instruments. To achieve this, a confirmatory factor analysis approach was followed in which a measurement model was constructed. The measurement model contained the latent variables (AL, PsyCap, OCB and ITL) with their respective observed indicators (i.e. items) and the relationships between the latent variables. The cut-off values of the effect sizes for correlations (i.e. relationships between the latent variables) in the study ranged from $r = \geq 0.10$ (small effect), $r = \geq 0.30$ (medium effect) to $r = \geq 0.50$ (large effect) (Cohen, 1992). The measurement model was used as the basis for the structural model in the second step. In the structural model, regression paths were added to determine whether the independent variables ‘predict’ the dependent variables (Kline, 2016). Authentic leadership was specified as independent, PsyCap as both independent and dependent and OCB and ITL as dependent variables. The default (i.e. maximum likelihood) estimator was used to estimate the models (Kline, 2016).

In both steps, the models’ fit to the data was evaluated by means of the following goodness-of-fit indices (Hu & Bentler, 1999; Kline, 2016): (1) the chi-square ($\chi^2$) and its associated degrees of freedom ($df$); (2) the standardised root mean square residual (SRMR); (3) the comparative fit index (CFI); (4) the Tucker–Lewis Index (TLI); and (5) the root means square error of approximation (RMSEA) and its associated confidence interval (CI). A non-significant chi-square statistic is considered to indicate a good fit with the sample data (Hu & Bentler, 1999) but is sensitive to sample size and often not a good indicator of model fit (Wang & Wang, 2020). For the CFI and TLI indices, values above 0.95 for CFI and TLI are regarded as acceptable (Hu & Bentler, 1999) but should be treated as guidelines in applied research (West, Taylor, & Wu, 2012). Wang and Wang (2020) consider 0.90 as an appropriate cut-off value for these two fit indices. For the RMSEA and SRMR indices, values smaller than 0.08
are accepted (Hu & Bentler, 1999). McDonald’s omega coefficient and Cronbach’s alpha coefficient were both used to calculate the internal consistency of the scales, with a cut-off value of 0.70 (Revelle & Zinbarg, 2009).

Lastly, the procedure for estimating indirect effects on the hypothesised model, as suggested by Hayes (2017), was used. Psychological capital was specified as a mediator in the analysis. Bootstrapping (using 10 000 samples), with bias-corrected confidence intervals (CIs), was used to generate more accurate estimations of possible indirect effects than standard methods. The bias-corrected CIs were set at 95% for all indirect effects. The lower and upper percentiles served as a limit in that if zero was not contained within limits, an indication of the indirect effect was achieved (Hayes, 2017).

Ethical consideration
This article adheres to the ethical guidelines for research. Ethical clearance was obtained from the North-West University (no. NWU-HS-2014-0143, 10-03-2015).

Results
Testing the measurement model
The hypothesised model consisted of four constructs: AL (one latent variable indicated by four manifest indicators or parcels), PsyCap (one latent variable indicated by four manifest indicators or parcels), OCB (latent variable) and ITL (latent variable). Parcels were created by averaging the items (as recommended by Little, Rhemtulla, Gibson, & Schoemann, 2013) for the four dimensions of AL and PsyCap, respectively. Authentic leadership and PsyCap were modelled as unidimensional in line with previous research (Coxen et al., 2016; Stander et al., 2015) and theory (Luthans et al., 2004). Organisational citizenship behaviours and ITL were modelled in line with theory. The model fitted the data well ($\chi^2 = 494.96$; $df = 129$; RMSEA = 0.07; CI: [0.06, 0.07]; CFI = 0.93; TLI = 0.92; and SRMR = 0.07) and was used as a basis for the structural model.

The descriptive statistics, reliabilities and correlations are reported in Table 1. All of the scales were reliable, ranging from 0.72 to 0.93. All the relationships between the variables were statistically significant in the expected directions. Practically significant relationships included AL with PsyCap ($r = 0.41$; medium effect), AL with OCB ($r = 0.31$; medium effect) and PsyCap with OCB ($r = 0.55$; large effect). Authentic leadership, PsyCap and OCB were statistically related to ITL, but only with a small practical effect: AL ($r = -0.24$), PsyCap ($r = -0.28$) and OCB ($r = -0.10$).

Testing the structural model
Regression paths between the constructs were added in a structural model with direct and indirect pathways specified. The model fit results were identical to those of the measurement model. The results, as shown in Figure 2, indicate that the estimated path coefficient from AL to PsyCap ($\beta = 0.41$, $p < 0.01$) was significant. Authentic leadership explained 16% of the variance in PsyCap (medium effect). Therefore, Hypothesis 1, stating that perceived AL associates positively with PsyCap, was accepted.

The results also indicated that the estimated path coefficients from AL to OCB ($\beta = 0.10$, $p < 0.05$) and ITL ($\beta = -0.15$, $p < 0.01$) were both significant. Hypothesis 2, stating that perceived AL associates positively with follower OCB, and Hypothesis 3, stating that perceived AL associates negatively with follower ITL, were accepted. The path coefficient from PsyCap ($\beta = 0.51$, $p < 0.01$) to OCB was significant. Additionally, the path coefficient from PsyCap ($\beta = -0.22$, $p < 0.01$) to ITL was also significant. Hypotheses 4 and 5, stating that PsyCap associates positively with OCB and ITL, were accepted.

Indirect effects of psychological capital
As indicated in Table 2, the indirect effect from AL to OCB via PsyCap (estimate = 0.21; 95% CI: 0.15, 0.27) was statistically significant as the CI did not include zero.
Similarly, the indirect effect from AL to ITL via PsyCap (estimate = -0.09; 95% CI: -0.14, -0.05) was also statistically significant, with the confidence interval excluding zero. These results support the main aim of the study, namely to establish PsyCap as a mediator in the relationship between AL and follower outcomes.

Hypotheses 6, stating that AL has an indirect impact on OCB through PsyCap, and 7, stating that AL has an indirect impact on ITL through PsyCap, were accepted.

### Discussion

Public healthcare is the first point of contact for the majority of low- to middle-class citizens in South Africa, which emphasises the importance of these institutions in providing quality care to patients (Doherty et al., 2018; Maphumulo & Bhengu, 2019). With increasing pressure, there is a call for positive relational leadership that can establish a conducive work environment (Gilson & Daire, 2011; Kumar, 2013) and for research investigating the mechanisms through which such job resources (e.g. leadership and employee psychological capabilities) operate (Van Veldhoven et al., 2020). Hence, the objective of this study was to investigate the indirect effect of perceived AL on OCB and ITL through the PsyCap of public healthcare employees.

The results of the study show that AL exerts an effect through specific mechanisms. More specifically, the results from the current study indicate that PsyCap acts as a mediator through which AL influences followers’ behaviours and attitudes positively. Authentic leaders create followers who feel in control and optimistic about autonomously pursuing and achieving goals even in the face of adversity, who, in turn, are prepared to ‘go the extra mile’ for both co-workers and the organisation, and who wish to remain with the organisation. These findings are in line with empirical studies in healthcare that support the notion that AL precedes the desired follower outcomes via PsyCap (see Alilyyani et al., 2018 for a review).

The current study supports the notion that authentic leaders act as a resource in the public healthcare environment by enhancing followers’ personal resources and fostering positive attitudes and behaviour. More specifically, the results show that an authentic leader – one who can develop an open and interactive relationship with subordinates – creates self-efficacious, hopeful, resilient and optimistic followers. This finding is in line with the JD-R theory, which postulates that job resources precede personal resources (Bakker & Demerouti, 2014, 2017), as well as with previous research (Amunkete & Rothmann, 2015; Du Plessis, 2014; Munyaka, 2012). Similarly, such a leader inspires followers to display altruistic behaviours and to ‘go the extra mile’ for the organisation. This finding is in line with the social exchange theory that postulates that individuals’ interactions are dependent on the actions of those involved in the interaction and, thus, are reciprocal (Blau, 1964). So followers will display positive behaviours in reaction to favourable actions displayed by an authentic leader. This is also in line with previous research (Malila et al., 2018; Shapira-Lishinsky, & Tsemach, 2014). Authentic leaders, furthermore, act as a ‘pull factor’, positively influencing those who wish to leave the organisation. This finding also supports existing research (Fallatah et al., 2017; Laschinger et al., 2016).

The results from the current study show that PsyCap has positive effects on employee behaviours. More specifically, self-efficacious, hopeful, resilient and optimistic followers also tend to display more altruistic behaviours towards their co-workers whilst also going beyond what is expected from them by the organisation. From the results of the current study, it seems that believing in one’s ability to master tasks (i.e. self-efficacy), persevering and creating pathways towards goals (i.e. hope), having a positive outlook about future success (i.e. optimism) and a perception that one can bounce back from adversity (i.e. resilience) matter for positive follower behaviours. This is in line with the JD-R theory (Bakker & Demerouti, 2014, 2017) and previous research (Newman et al., 2014; Wang et al., 2014; Wu & Nguyen, 2019). The results also indicate that self-efficacious, hopeful, resilient and optimistic followers are less inclined to want to leave the organisation. Hence, PsyCap not only enables positive behaviours but also acts as a ‘pull factor’ to retain employees. Consequently, the results are in line with the JD-R theory (Bakker & Demerouti, 2014, 2017) and previous research (Dhiman & Arora, 2018; Maloney et al., 2018).

The present study makes three theoretical contributions. Firstly, the study contributes to the limited research on AL in public healthcare. It does so by illustrating that AL acts as a resource for desirable follower outcomes in the public healthcare sector. Secondly, it contributes to the JD-R literature by illustrating the mechanism (i.e. PsyCap) through which AL exerts its influence, leading to a more nuanced understanding of why a job resource like AL is beneficial. Lastly, it contributes to PsyCap literature by illustrating that it is helpful in a country other than the United States of America.

### Implications for practice

Authentic leadership contributes to the self-efficacy, hope, resilience and optimism of followers. For positive outcomes to be reached, the presence of AL is an important stimulator of employees’ personal resources to enable them in their work, which in turn may help them contribute to quality client care (Alilyyani et al., 2018). With this said, AL development should be considered for all managers and supervisors. As ineffective leadership contributes to the current public healthcare crises (Doherty et al., 2018), leadership development is essential. In this regard, coaching and mentoring can play an essential role in developing authentic leaders (Kinsler, 2014; Maldanado, 2013).

Because PsyCap also led to employees exhibiting OCB whilst lowering their ITL, development from the perspective of POB is suggested. In line with this suggestion, Luthans and
Youssef-Morgan (2017) developed a psychological capital intervention (PCI) model and discussed at length the conditions under which these interventions should be administered for an optimal impact. A typical PCI entails setting goals, generating pathways to achieve these goals, mentally rehearsing pathways and developing plans to overcome envisaged obstacles (Luthans & Youssef-Morgan, 2017). Human resource practitioners or industrial psychologists in the healthcare industry can initiate AL and PsyCap development initiatives to foster positive employee outcomes (such as OCB and reduced ITL).

Limitations and recommendations for future studies

The study was cross-sectional, which limited the ability to make causal inferences. Although the hypotheses are in line with theory, a longitudinal approach is encouraged for a confirmation of the predictive effect of AL on OCB and the intentions of employees to leave the organisation. A carefully designed longitudinal study (see Spector, 2019 for recommendations) is essential for establishing a mediating effect (Hayes, 2017). Another limitation is attributed to self-report surveys being the only source of information for the study, as well as the contextual understanding of the variables in the study. These two factors can be the reason for the common method bias (i.e. variance that is attributed to the measurement method instead of the constructs that the measures represent), which can lead to measurement errors (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To address this limitation, future studies could consider obtaining measurements of AL from respondents other than the subordinate (follower) or from the leader directly. Authentic leadership only explained a certain proportion of the variance in PsyCap; therefore, other antecedents of PsyCap should be explored. Similarly, little variance was explained in ITL, and more research is needed to identify the determinants of ITL, given the importance of the public healthcare sector. Authentic leadership and PsyCap research is at an early stage in the South African context, particularly in the healthcare sector; more research is needed to determine the replicability of the current findings. According to Gilmartin and D’Aunno (2007), the concept of leadership should be explored because the health sector differs from most other sectors. The sample consisted of employees from all departments, and future research could perhaps focus on core frontline staff, such as healthcare professionals. Lastly, the current study did not control for the impact of demographic variables in the model. Although there were no significant differences between different socio-demographic groups (e.g. age, gender, occupation and race) on the latent variables, it is recommended that researchers consider the influence of demographic variables in future studies. It is also recommended that they do so in line with the recommendations by Bernerth and Aguinis (2016).

Conclusion

Despite its limitations, the study’s results indicated that AL contributes positively to desirable follower behaviours and attitudes, both directly and indirectly by fostering follower

PsyCap. This study contributes to the literature by highlighting the value of both AL and PsyCap and does so in an environment where effective leadership is essential. Public healthcare facilities are, therefore, encouraged to develop their leaders into open, transparent, consultative and morally guided individuals.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Author’s contributions

W.S. acted as the primary researcher as this study formed part of her master’s research. She shared in the conceptualisation of the article, collection of the data, interpretation of the research results and the writing of the article. M.W.S. and L.v.d.V. acted as supervisor and co-supervisor, respectively. They played an advisory role, assisting in the conceptualisation of the study, collecting data, assisting with the interpretation of the research results and refining the research article. L.C. also assisted in refining the research article and performed the technical editing of the manuscript.

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Data availability statement

Data sharing will be done in line with ethics requirements. The data and syntaxes are the intellectual property of the North-West University and will be provided upon reasonable requests. Contact the authors for more information.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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