

The effect of authentic leadership and psychological capital on work engagement: the mediating role of job satisfaction

Authentic leadership and psychological capital

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Abstract

Purpose – This study aims to investigate the effect of authentic leadership and psychological capital (PsyCap) on work engagement via job satisfaction by employing the job demands-resources (JD-R) model.

Design/methodology/approach – Participants were 307 (52% male and 48% female) employees randomly recruited from a state-owned company in the eastern part of Indonesia. Most participants had completed an undergraduate degree with a mean age of 27.55 (SD = 7.89). The study employed a three-wave data collection technique to rule out any common method biases.

Findings – The results suggested that the theoretical model and empirical data showed a good fit (CMIN/DF = 2.19 and RMSEA = 0.06), indicating an indirect effect of authentic leadership and PsyCap on work engagement via job satisfaction. The effect of authentic leadership on work engagement was fully mediated by job satisfaction. In contrast, job satisfaction only partially mediated the relationship between PsyCap and work engagement.

Research limitations/implications – First, this study did not explore any further consequences of gender equality. Second, although the data have been compared with some existing studies, this study did not collect cross-cultural data from different countries. Lastly, the data were collected from a state-owned enterprise, which may limit generalisation to other organisations.

Originality/value – This study offered a new perspective by examining the implications of the JD-R model in the eastern part of Indonesia, where organisation culture is predominantly influenced by Buginese values. Furthermore, the inclusion of job satisfaction into the model added new information regarding the importance of mediating variables in explaining the indirect effect of job and personal resources.

Keywords Authentic leadership, Psychological capital, Work engagement, Job satisfaction, Culture

Paper type Research paper

Introduction

Human resource management (HRM) needs the right strategies and implementations to achieve sustainable organisational growth (Kramar, 2014). Certain employee attitudes and behaviours support and encourage business performance (Agrawal *et al.*, 2012). Despite the universal implications of many business models, theories and practices, the role of national culture should be considered as well.

Leadership and organisational studies are cross-cultural investigations. For instance, some concepts in organisational studies, such as authentic leadership, may have to consider the role of the collective (Algera and Lips-wiersma, 2012; Nyberg and Sveningsson, 2014) and how people practise their values (Oh *et al.*, 2017), while some studies have found consistency across culture



such as the psychological capital (PsyCap) (Wernsing, 2014). Therefore, this study intends to examine the job demand-resources (JD-R) theory (Bakker and Demerouti, 2007; Schaufeli and Bakker, 2004) and two positive organisational behaviours (authentic leadership and PsyCap).

Some studies have postulated that organisational commitment (Liu and Cohen, 2010), job satisfaction (Chamundeswari, 2013), psychological well-being (Wright and Cropanzano, 2000) and PsyCap (Karatepe and Karadas, 2015; Luthans *et al.*, 2007) have positive impacts on desirable employee outcomes. Among those positive states, work engagement has been identified as the most positive work attitude. Employees who highly engage with their day-to-day work routine experience a strong relationship with their organisation (Bakker, 2011). This engagement can be identified by energetic work behaviours (vigour), dedication to work (dedication) and deep involvement in a work role (absorption) (Bakker, 2011). All these aspects support task completion (Bakker, 2011; Bakker *et al.*, 2008). High engagement can increase an organisation's productivity (Bakker, 2011), employee's performance (Breevaart *et al.*, 2016), commitment (Simons and Buitendach, 2013) and job crafting (Bakker, 2017).

According to the JD-R model proposed by Bakker and Demerouti (2008), Thompson *et al.* (2015) and Bakker (2011), work engagement is determined by two factors – job resources and personal resources. Job resources include all physical, social, psychological and organisational aspects of a job. These resources assist employees in reducing the negative effects of job demands and attaining goals and facilitate improvement in the workplace (Schaufeli and Bakker, 2004). Personal resources also allow employees to engage in positive self-evaluation of the organisation (Bakker and Demerouti, 2008).

Supervisory supportive style is one of the many employee job resources (Bakker and Demerouti, 2008). For instance, supervisor's transformational style could be a means to support engagement within an organisation (Breevaart *et al.*, 2014; Tims *et al.*, 2011). Leader's behaviours potentially influence their subordinates' work engagement and, consequently, their performance. Leadership styles can have positive or negative consequences on an employee's mental health, work attitude and behaviours (Harms *et al.*, 2017). Authentic leadership is another essential job resource (Alok and Israel, 2012; Walumbwa *et al.*, 2010; Wang and Hsieh, 2013). Leaders with an authentic style exemplify "good leader" behaviours, manifest transformational leader behaviours and, eventually, encourage desirable work attitudes and behaviours (Avolio *et al.*, 2009; Gardner *et al.*, 2011), which improves organisational commitment (Rego *et al.*, 2016), work engagement (Walumbwa *et al.*, 2010) and performance (Peterson *et al.*, 2012).

In addition to authentic leadership, employees also require personal resources to maintain their work engagement (Bakker, 2011; Bakker and Demerouti, 2008). PsyCap is a collection of positive psychological resources (Thompson *et al.*, 2015). It comprises hope, efficacy, resilience and optimism (Luthans *et al.*, 2015). PsyCap could become an employee's personal resource and help maintain engagement (De Waal and Pienaar, 2013; Simons and Buitendach, 2013; Thompson *et al.*, 2015).

Nevertheless, the effect of authentic leadership and PsyCap on work engagement may be mediated by other variables. The effect of positive leader behaviours (i.e., authentic leadership) and positive psychological resources (i.e., PsyCap) may satisfy employees in dealing with their demanding routines (Amunkete and Rothmann, 2015). Job satisfaction potentially mediates the effect of job (Azanza *et al.*, 2013) and psychological (Badran and Youssef-Morgan, 2015; Wefald and Downey, 2010) resources on employees' positive outcomes. Although job satisfaction leads to employee engagement (Alarcon and Edwards, 2011; Bakker and Demerouti, 2008; Wefald and Downey, 2010; Yeh, 2013), it is less known whether the mediating role of job satisfaction is consistent when both resources (i.e., authentic leadership and PsyCap) are accounted for predicting work engagement.

From a philosophical standpoint, being authentic requires more than just expressing the authentic self; it invokes personal responsibility and the influence of the collective

(Algera and Lips-wiersma, 2012). In practice, Algera and Lips-wiersma (2012) argued that the values and goals of followers may not be congruent with those of their leaders, which potentially hinders the perceived authenticity. The practice of authentic leadership may vary from culture to culture (Oh *et al.*, 2017; Stewart *et al.*, 2017). Therefore, investigating the effect of authentic leadership in different cultures may provide new insight on how the concept is transferred.

In terms of cross-cultural studies, PsyCap tends to show consistent validity (Wernsing, 2014) and proves to be a fruitful psychological resource (Avey *et al.*, 2011a; Kong *et al.*, 2018; Luthans *et al.*, 2015; Newman *et al.*, 2014). This is also in line with the JD-R model (Bakker and Demerouti, 2007; Schaufeli and Bakker, 2004). Some national cultures are influenced by tribal or ancient values. For instance, a number of studies revealed that Eastern Indonesians are nurtured with some degree of *Bugis* or *Buginese* values (Jufri and Wirawan, 2018; Tamar *et al.*, 2017). These values are also a part of organisational practices and leverage business performance (Tamar *et al.*, 2019). Examining the indirect effect of authentic leadership and PsyCap on engagement in this culture may benefit scholars and practitioners.

Given the above background, this study addresses the following research question: “does the effect of authentic leadership and PsyCap on work engagement via job satisfaction persist in Eastern Indonesia?”

Literature review and hypotheses

Work engagement

Work engagement refers to a positive work attitude characterised by vigour, dedication and absorption (Bakker, 2011; Bakker and Demerouti, 2008; De Waal and Pienaar, 2013). Earlier, Bakker *et al.* (2008) defined work engagement as a positive state wherein an individual experiences three characteristics – vigour, dedication and absorption. In other words, they should experience a high degree of vigour, dedication and absorption in their job (Bakker *et al.*, 2008). Vigour is characterised by one’s energy to complete a task. Dedication implies full involvement in the job and involves inspiration, pride and willingness to face challenges. Lastly, absorption refers to an individual experiencing “immersion” in conducting a task and genuinely enjoying the job.

Work engagement, as a construct, exhibits distinctive characteristics from other negative work attitudes such as burnout (Wefald and Downey, 2010). Many researchers revealed the best ways to maintain work engagement within organisations, as this construct directly affects performance (Bakker *et al.*, 2008). Engaged employees show enjoyment and deep involvement in completing their work. As suggested by some findings, work engagement serves as the antecedent of a positive work behaviour and improves performance regardless of the type of organisation (Breevaart *et al.*, 2016; Chaurasia and Shukla, 2014; Gruman and Saks, 2011). Bakker and Demerouti (2008) introduced the work engagement theoretical model:

The above model proposes that work engagement is stimulated by the existence of job resources (e.g. supervisor) and personal resources (e.g. self-efficacy). Job resources are sourced from organisations such as supervisory support and positive leader behaviours, while personal resources come from individual psychological states such as efficacy and optimism (see Figure 1).

Authentic leadership

The word “authentic” originates from the Greek language and means “one who has full power” and can be defined as “aware of own domain”. This means that leaders with authentic characteristics know themselves and are willing to admit their strengths and weaknesses (Gardner *et al.*, 2011). This concept is widely used in leadership studies and

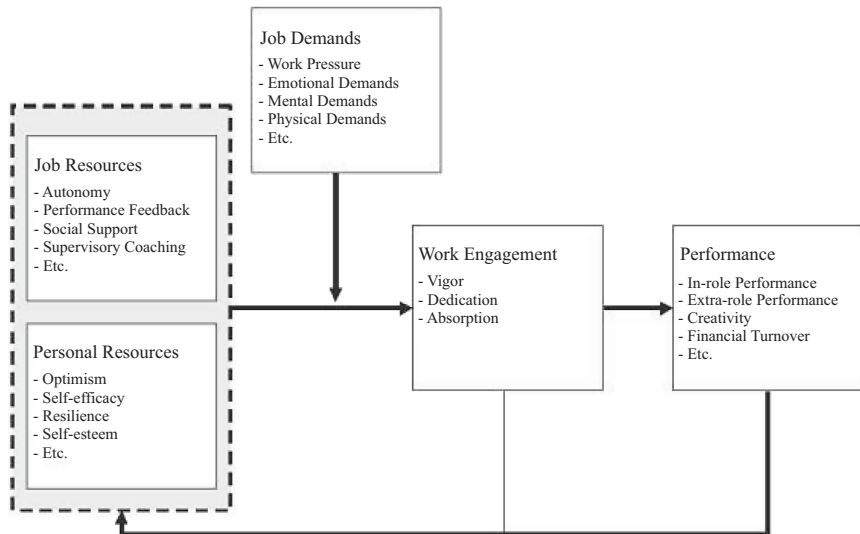


Figure 1.
Work engagement
theoretical model by
Bakker and
Demmeroti (2008)

practices. The concept of authentic leadership is commonly defined as a leader’s ability to understand their own self, including their strengths and weaknesses. The term developed further and became one of the most studied behaviours of leaders. Authentic leadership generally has a positive effect on employee attitudes and behaviours and, eventually, organisations.

On the other hand, [Walumbwa et al. \(2010\)](#) defined authentic leadership as a leadership process that involves a leader’s resources and the organisation’s support. In this respect, leaders with abundant personal resources and support from their organisation may exhibit more frequent positive attitudes and behaviours towards their subordinates. Authentic leaders focus not only on themselves but pay special attention to their employee’s development ([Avolio and Gardner, 2005](#)). [Walumbwa, Avolio, Gardner, Wernsing and Peterson \(2008\)](#) suggested four aspects of authentic leadership – self-awareness (understanding oneself), relational transparency (authentic self in social interactions), balanced processing (being balanced in decisions and treating others) and internalised moral perspective (high moral values).

Some studies found that authentic leadership was positively related to employee’s performance ([Wang et al., 2014b](#)), leader’s credibility ([Wang and Hsieh, 2013](#)), employee’s commitment ([Rego et al., 2016](#)) and work engagement ([Alok and Israel, 2012](#); [Wang et al., 2014a](#)).

Psychological capital (PsyCap)

The term PsyCap was coined from the positive organisational behaviour approach ([Youssef-Morgan and Luthans, 2015](#)). PsyCap is defined as a positive mental state characterised by the existence of high efficacy, optimism, resilience and hope ([Luthans et al., 2015](#); [Newman et al., 2014](#); [Youssef-Morgan and Luthans, 2015](#)). Hope implies having a clear plan and goal towards the future. Optimism is related to a positive perspective towards life events. Resilience refers to the ability to maintain high performance and bounce back from problems or failures. Lastly, self-efficacy refers to a belief about one’s ability to use resources in solving problems. PsyCap contributes positively to performance ([Luthans et al., 2007](#)), job satisfaction ([Karatepe and Karadas, 2015](#)) and work engagement ([Chen, 2015](#)) across various jobs.

Job satisfaction

Locke (1969) defined job satisfaction as an emotional condition wherein people (employees) experience pleasure in doing a particular job. This emotional condition emerges when employees receive an expected evaluation of their job. Conversely, discrepancies between job expectation and outcomes may cause job dissatisfaction. Kaliski (1976) postulated that job satisfaction refers to awareness of prosperous work conditions, while Aziri (2011) argued that it is the perception of fulfilling psychological and non-psychological aspects and should not be associated with financial fulfilment.

Herzberg (1968) introduced a two-factor model when describing the source of job satisfaction, please see the following Table 1:

Hygiene factors	Motivators
Company policies	Achievement
Supervision	Recognition
Interpersonal relations	Work itself
Work conditions	Responsibility
Salary	Advancement
Status	Growth
Job security	

Source(s): Herzberg (1968)

Table 1.
Hygiene factors and motivators

The hygiene factors prevent an individual from further dissatisfaction. As long as the hygiene factors are fulfilled, an individual is unlikely to lose satisfaction at work. However, having a high degree of hygiene factor does not guarantee a high degree of satisfaction. In order to increase satisfaction, an individual needs motivational factors (motivators), such as achievement and recognition. In other words, hygiene factors prevent dissatisfaction, while motivators increase satisfaction. Research in this area showed a positive impact of job satisfaction on organisational commitment (Froese and Xiao, 2012), work engagement (Yeh, 2013), performance (Jones *et al.*, 2009) and a negative effect on turnover intention (Amunkete and Rothmann, 2015) (see Table 1).

Impact of authentic leadership and PsyCap on work engagement through job satisfaction

Bakker (2011) developed the JD-R model theory and found that two primary resources heavily influenced the effect of work engagement on employees: job and psychological resources. Job resources are a form of institutional support such as encouragement, support, presence and direction from supervisors or leaders, etc. (Bakker, 2011; Salanova *et al.*, 2005; Schaufeli and Bakker, 2004). Authentic leaders focus on their leadership tasks as well as development of their subordinates (Woolley *et al.*, 2011). This support could become a job resource and contribute positively to work engagement (Alok and Israel, 2012).

Aside from authentic leadership, personal resource has become a supporting factor for work engagement (Bakker and Demerouti, 2008). Psychological resources are vital for an employee's development (Luthans *et al.*, 2006) and work engagement (Chaurasia and Shukla, 2014). Authentic leadership and PsyCap have a similar effect on an employee's work engagement. Both variables can predict the increase of employees' work engagement. This has been supported by previous studies (e.g., De Waal and Pienaar, 2013; Simons and Buitendach, 2013; Walumbwa *et al.*, 2010; Wang and Hsieh, 2013).

Some studies discovered that job satisfaction has a direct impact on work engagement (Alarcon and Edwards, 2011; Wefald and Downey, 2010). Similarly, authentic leadership

(Amunkete and Rothmann, 2015; Azanza *et al.*, 2013; Walumbwa *et al.*, 2010) and PsyCap (Avey *et al.*, 2011a; Bergheim *et al.*, 2015; Bitmiş and Ergeneli, 2013; Luthans *et al.*, 2007) were found to have a positive relationship with job satisfaction. It is possible for both authentic leadership and PsyCap to influence work engagement via job satisfaction.

Despite the debate regarding distinct cultural values and the practical implications of authentic leadership (Algera and Lips-wiersma, 2012; Nyberg and Sveningsson, 2014; Stewart *et al.*, 2017), both resources (i.e. authentic leadership and PsyCap) consistently foster many desirable employees' attitudes (Adil and Kamal, 2016; Laschinger and Fida, 2014). Furthermore, some studies also have documented that authentic leadership and PsyCap together predict positive and negative employee outcomes (Clapp-Smith *et al.*, 2009; Laschinger and Fida, 2014; Rego *et al.*, 2016; Woolley *et al.*, 2011; Woolley *et al.*, 2011). Considering the unique national values of Eastern Indonesia (Tamar *et al.*, 2019) and how the national values support leadership (Oh *et al.*, 2017), this study argues that authentic leadership and PsyCap will accrue work engagement by providing resources for employees; this country adapts local values in organisational practices.

All the aforementioned findings provide convincing evidence that authentic leadership and PsyCap positively influence work engagement via employees' job satisfaction. The theoretical framework is presented in the following Figure 2.

After reviewing the literature, this study proposes the following hypotheses:

- (1) Authentic leadership and PsyCap positively influence work engagement.
- (2) Authentic leadership and PsyCap positively influence job satisfaction.
- (3) The positive influence of authentic leadership and PsyCap on work engagement is mediated by job satisfaction.

Method

Participants

The participants were employees of a state-owned company in Eastern Indonesia. According to the company's HRM, the company employed 750 employees in nine business units. Participants were randomly selected with a targeted number of 40 participants in each unit. Of the 360 participants, 307 participants (85%; 52% male and 48% female) agreed to participate in the study. Most participants had bachelor's degrees (51%), annual contracts (32.9%), civil servant contracts (31.3%), non-civil servant contracts (22.5%) and some were interns (12.4%).

Measures

Four measures were considered (work engagement, authentic leadership, PsyCap and job satisfaction), and they were all adapted to Bahasa Indonesia. Each measure underwent a

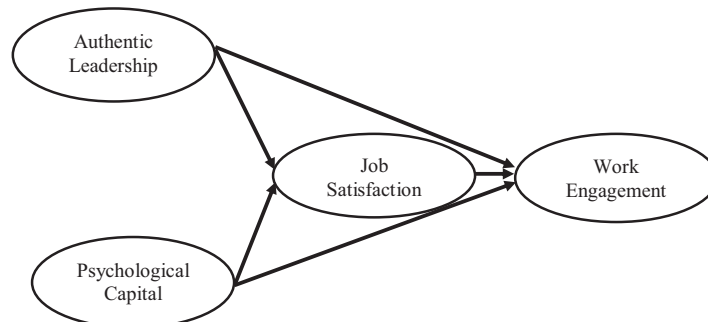


Figure 2.
The research theoretical model

robust translation and re-translation process. Then, a team of experts, consisting of three international scholars, assessed the translation quality. The wording of each item was tested by asking 30 people to read each item.

Utrecht work engagement scale (UWES). This study used the UWES developed by [Schaufeli and Bakker \(2003\)](#) with a five-point Likert scale (where 1 = strongly disagree and 5 = strongly agree). The scale consisted of 17 items with three subscales (i.e. vigour, dedication and absorption). An example of UWES items was “At my job, I feel bursting with energy”. Confirmatory factor analysis (CFA) showed that the measurement model fitted the empirical data (CMIN/DF = 2.8, RMSEA = 0.07, CFI = 0.95). Also, Cronbach’s alpha coefficient was 0.96, suggesting that the scale was reliable.

Authentic leadership inventory (ALI). ALI was developed to measure the level of authentic leadership. This measure has been investigated and found to be valid and reliable ([Neider and Schriesheim, 2011](#)). The measure uses the Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The aspects measured were self-awareness, relationship transparency, balanced processing and internalised moral perspective. One example of the items is “My leader shows consistency between his/her beliefs and actions”. The construct validity test using the CFA technique showed a good fit (CMIN/DF = 2.8, RMSEA = 0.07) with acceptable reliability (Cronbach’s alpha = 0.89).

PsyCap questionnaires (PCQ). PCQ measures employees’ PsyCap ([Luthans et al., 2015](#)) and has shown acceptable validity and reliability ([Antunes et al., 2017](#); [Lorenz et al., 2016](#)). It uses a Likert scale, with options ranging from 1 (strongly disagree) to 5 (strongly agree). The scale dimensions include self-efficacy, hope, resilience and optimism. One of the PCQ items was “Right now I see myself as being pretty successful at the workplace”. The CFA showed a close fit (CMIN/DF = 2.6, RMSEA = 0.07, CFI = 0.90), and the Cronbach’s alpha coefficient indicated high reliability (0.90).

Minnesota satisfaction questionnaire (MSQ–short version). Job satisfaction was measured using a 20-item *MSQ–short version*, which was developed by [Weiss et al. \(1967\)](#). This measure contains 20 dimensions, and each item represents one dimension. The scale administration requires participants to confirm their degree of satisfaction using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). One example of the items is “How satisfied are you with the working condition?” The fit index for the construct validity test showed a close fit (CMIN/DF = 2.9, RMSEA = 0.07, CFI = 0.90) with high reliability (Cronbach’s alpha = 0.93).

Procedure

The survey booklets were administered using a three-wave data collection process to eliminate common method bias ([MacKenzie and Podsakoff, 2012](#)). In the first wave, participants were asked to fill out their demographic information using ALI and PCQ. Ten days after the first wave, they were asked to complete the MSQ. Ten more days later, the participants completed the UWES. All participants fully participated in the three-wave data collection. The three-wave technique allowed the data to be collected longitudinally.

Results and discussion

Results

Table 2 depicts descriptive statistics and correlations between variables.

The participants’ ages ranged from 18 to 59 years with the mean age of 27.55 years ($SD = 7.89$). All participants had been working at the organisation for at least one year ($M = 4.97$, $SD = 6.34$). The results showed a mean score of 61.64 ($SD = 9.33$), 111.97 ($SD = 14.74$), 77 ($SD = 16.67$) and 77.15 ($SD = 11.07$) for authentic leadership, PsyCap, work engagement and job satisfaction, respectively. Generally, participants were under 30 years of age and had around 5 years of work experience.

In terms of correlations, tenure had a strong positive relationship with age ($r = 0.81, p < 0.001$), while authentic leadership had a considerably positive relationship with PsyCap ($r = 0.61, p < 0.001$), work engagement ($r = 0.40, p < 0.001$) and job satisfaction ($r = 0.42$). A strong relationship was also observed between PsyCap and work engagement ($r = 0.56, p < 0.001$) and between PsyCap and job satisfaction ($r = 0.57, p < 0.001$). A stronger relationship was found between job satisfaction and work engagement ($r = 0.64, p < 0.001$).

The results from structural equation modelling (SEM) suggested that the empirical findings had confirmed the proposed theoretical model with CMIN/DF = 2.19 and RMSEA = 0.06 (see Table 3). The acceptable CMIN/DF and RMSEA supported a close fit between the theoretical and empirical models.

The regression coefficients are illustrated in Figure 3 and Table 4. The results suggested that authentic leadership has an indirect impact on work engagement ($\beta = 0.03, p > 0.05$). On the contrary, PsyCap seems to have a direct impact ($\beta = 0.40, p < 0.001$). Thus, hypothesis 1 was partially supported.

Table 2.
Descriptive statistics and correlations between variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Age	27.55	7.89	–				
2. Tenure	4.97	6.34	0.81***	–			
3. Authentic leadership	61.64	9.33	0.04	0.01	–		
4. PsyCap	111.97	14.74	0.03	0.03	0.61***	–	
5. Work engagement	77	16.67	–0.02	–0.01	0.40***	0.56***	–
6. Job satisfaction	77.15	11.07	–0.01	0.03	0.42***	0.57***	0.64***

Note(s): $N = 307$, *** $p < 0.001$, $M = \text{Mean}$, $SD = \text{Standard deviation}$

Table 3.
The conformity index between theoretical and empirical models

Index	The critical value for fit	Value	Decision
CMIN/DF	<4.00	2.19	Acceptable
AGFI	>0.90	0.62	Unacceptable
RMSEA	<0.08	0.06	Acceptable
CFI	>0.90	0.76	Unacceptable

Note(s): $N = 307$, CMIN/DF = chi-square test/ degree of freedom; RMSEA = the root square mean error of approximation; AGFI = adjusted goodness of fit index; CFI = the comparative fit index

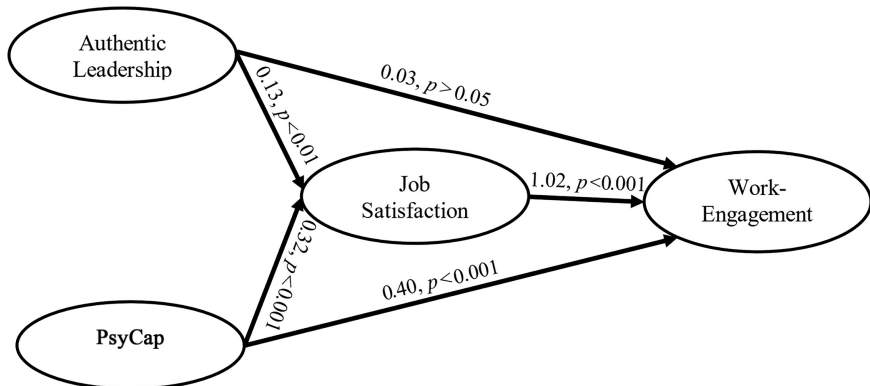


Figure 3.
The empirical model of the effect of authentic leadership and PsyCap on work engagement via job satisfaction

The impact of authentic leadership on an employee’s job satisfaction was positive and significant, with a regression coefficient of $\beta = 0.13$ ($p < 0.01$). Similarly, the impact of PsyCap on job satisfaction was also significant ($\beta = 0.32$, $p < 0.01$). The results confirmed the direct impact of authentic leadership and PsyCap on job satisfaction (supporting Hypothesis 2). Similarly, the effect of job satisfaction on work engagement was significant with a regression coefficient of $\beta = 1.02$ ($p < 0.001$), supporting hypothesis 3. The impact of authentic leadership on work engagement was fully mediated and the impact of PsyCap on work engagement was partially mediated by the employees’ job satisfaction. It is evident that authentic leadership and PsyCap coexists in predicting employees’ work engagement via job satisfaction. Moreover, PsyCap possibly impacts work engagement regardless of the level of job satisfaction.

This study also examined any potential gender effects on the relationships. A moderated regression analysis was performed using the participant’s and leader’s gender as moderating variables. However, the results suggested non-significant moderating effects of gender.

Discussion

This study investigated the effect of authentic leadership and PsyCap on work engagement via job satisfaction. In addition, it examined the application of the JD-R model in the *Bugis* culture. In general, the results supported the application of the JD-R model. The following section will discuss the findings in greater detail.

The correlations among variables were in line with most empirical studies. Referring to some early investigations, authentic leadership had a positive association with desirable employee outcomes (Alok and Israel, 2012; Azanza *et al.*, 2013; Woolley *et al.*, 2011) such as PsyCap (Adil and Kamal, 2016; Bergheim *et al.*, 2015; Luthans *et al.*, 2007; Thompson *et al.*, 2015). These two variables act as the primary resources of work engagement. In addition, both constructs were developed from positive organisational behaviours and share similar fundamental features (Caza *et al.*, 2010; Luthans and Avolio, 2003).

In terms of gender effect, authentic leadership and PsyCap showed consistent results for male and female employees. Participants showed similar responses regardless of their gender. The results confirmed a previous study wherein the first and second order structures of authentic leadership and PsyCap were consistent across men and women (Caza *et al.*, 2010). The organisation context was less dominated by males and tended to embrace gender equality. The equal number of male and female employees reflected the gender equality prevalent in the organisation. The effect of gender on the leadership would be salient only if the organisation was predominantly led by male leaders (Eagly and Karau, 2002). Female leaders, in most cases, could compete with their male counterparts only if the context allowed gender equality and prevented male domination (Eagly, 2007).

In contrast, a previous study found that gender moderated the effect of authentic leadership on a positive work climate and PsyCap (Woolley *et al.*, 2011). However, the data

Directions			Estimate	S.E.	C.R.
Job satisfaction	←	Authentic leadership	0.13**	0.05	2.81
Job satisfaction	←	PsyCap	0.32***	0.05	6.94
Work engagement	←	Job satisfaction	1.02***	0.15	6.62
Work engagement	←	PsyCap	0.40***	0.07	5.25
Work engagement	←	Authentic leadership	0.03	0.08	0.35

Note(s): $N = 307$, β = regression estimate, SE = standard error, CR= critical ratio, ** $p < 0.01$, *** $p < 0.001$

Table 4.
Regression weights

were collected in predominantly male organisations where most of the leaders were male. Since no gender effects were found in this study, the analysis continued testing the proposed theoretical model.

The results showed that only PsyCap directly impacted work engagement. The JD-R model theory (Schaufeli and Bakker, 2004; Bakker and Demerouti, 2008) stated that work engagement would persist if an individual had enough job and personal resources to complete the demanding tasks. Although the impact of authentic leadership and PsyCap on work engagement has been previously established (Alok and Israel, 2012; Thompson *et al.*, 2015), authentic leadership could have an indirect impact on work engagement.

The employees' perception of their supervisors' authenticity did not immediately trigger their need to dedicate themselves and utilise all their energy for their job. However, a direct impact may occur, as previously documented by researchers in different organisations, because authentic leadership is a vital job resource to maintain work engagement (Bakker and Demerouti, 2008; Schaufeli and Bakker, 2004).

Furthermore, PsyCap and authentic leadership simultaneously influenced job satisfaction. Positive psychological traits lead employees to job satisfaction. This was in line with some previous studies that found a positive impact of PsyCap on job satisfaction (Bergheim *et al.*, 2015; Karatepe and Karadas, 2015; Larson and Luthans, 2006). Authentic leadership increases work engagement by leveraging an employee's job satisfaction. Leaders with an authentic personality display high moral values and high consideration towards others and treat others with fairness. With these positive characteristics, people feel respected and recognised. Recognition and respect from leaders become motivational factors, leading to job satisfaction (Herzberg, 1968; Locke, 1969).

The study also examined the impact of job satisfaction on work engagement. Similar to some previous findings, job satisfaction directly impacted work engagement. In line with the job satisfaction theory, job satisfaction has a positive influence on work attitude and work behaviour (Saari and Judge, 2004). Therefore, a high level of job satisfaction leverages employees' work engagement, as the employees feel satisfied with their jobs, which later lead them to dedicate themselves to the job.

The results also showed that authentic leadership and PsyCap simultaneously influenced work engagement via job satisfaction. Alok and Israel (2012), Bamford *et al.* (2013) and Walumbwa *et al.* (2010) found a similar effect of authentic leadership. Employees' work engagement requires a number of resources, both personal and job. Authentic leaders could be perceived as the employees' motivational factors and help them recharge their resources. In contrast, negative leader behaviours would be unlikely to accrue work engagement, as the employee would experience job dissatisfaction.

On the other hand, the impact of PsyCap on work engagement was partially mediated by job satisfaction. PsyCap is a collection of positive psychological traits that have been proven to improve desirable employee outcomes such as job satisfaction and work engagement (Avey *et al.*, 2011a). It is a personal resource and can be intrinsically experienced by individuals (Avey *et al.*, 2011b; Luthans *et al.*, 2015). Employees can immediately sense their positive personal resources as they encounter critical circumstances or if they need the resources to tackle demanding tasks. Feeling satisfied with a job creates a resourceful condition wherein employees are eager to utilise their energy and dedicate themselves. Thus, PsyCap impacts work engagement by providing immediate personal resources and creating satisfying psychological conditions.

Authentic leadership and PsyCap originate from a positive organisational behaviour concept and share their fundamental structure (Caza *et al.*, 2010; Luthans and Avolio, 2003). They both satisfy an employee's psychological state, which later leads to work engagement. This study has illuminated the application of authentic leadership and PsyCap in a different culture. Although the *Bugis* culture inherits different values and principles, authenticity and

positive mental states tend to be consistent. This empirical study provided an alternative explanation to the application of authentic leadership, PsyCap and the JD-R model across cultures. Although some scholars argued that authenticity is somehow inapplicable and mixed with inauthenticity (Nyberg and Sveningsson, 2014; Shaw, 2010), each culture finds a way to enable, facilitate or even foster leaders' authenticity and employees' PsyCap.

Eastern Indonesia is predominantly influenced by the *Bugis* culture, which is distinct from Java or *Jawa*, the major ethnicity and culture in Indonesia. The *Bugis* people are implicitly influenced by their values and principles in performing business (Tamar *et al.*, 2017, 2019). Considering the philosophical and cultural approach to authenticity (Algera and Lips-wiersma, 2012; Nyberg and Sveningsson, 2014; Shaw, 2010; Stewart *et al.*, 2017), the employees in this study could have unique perspectives towards authenticity that could hinder the effect of leader's authenticity on work engagement. This study has confirmed that the theoretical model fit the empirical data, implying that the results are in line with the JD-R model. It hoped to shed light on the application of authentic leadership and PsyCap across cultures and values.

Research implications

After considering the findings, this study offers three implications. First, the findings provide new insight on how to implement authentic leadership within an organisation. Regardless of the values and cultural background, it is likely for universal authenticity to be acceptable across different cultures. Thus, organisations may still adopt aspects of authentic leadership (e.g. self-awareness and transparency). Leaders who perform these authentic behaviours are perceived as positive leaders, and they may potentially leverage employee's work engagement through job satisfaction.

Second, this study confirmed that employees need resources to maintain their engagement. Ensuring authentic leadership and PsyCap coexist will benefit both employees and their organisation. Thus, systematic interventions may endure the positive effects. Some previous studies have introduced PsyCap interventions (Luthans *et al.*, 2006; Rew *et al.*, 2014), and this may be used as a starting point. While PsyCap provides personal resources for employees, it also acts as an antecedent of authentic leadership (Luthans and Avolio, 2003). Thus, PsyCap perpetuates the existence of authentic leadership in organisations as the employees develop their leadership skills.

Third, it is still relevant to incorporate national or cultural values in developing authenticity and PsyCap in organisations. The universal concept of leader authenticity and PsyCap can persist within different cultural contexts. As authenticity was found to be essential, a competency modelling programme (Campion *et al.*, 2020) may help an organisation align certain values with authenticity and positive mental states.

Limitations and future research directions

Some studies have discovered the role of gender in leadership (e.g. Woolley *et al.*, 2011). However, this study found that gender had no interactions with authentic leadership and PsyCap. Future studies should investigate the effect of gender on authenticity. Is the perceived leader's authenticity influenced by similarity pressure? (Eagly, 2007) Or does the business climate in Eastern Indonesia encourage men and women to behave in certain ways?

Second, although this study suggested that authentic leadership and PsyCap favoured job satisfaction and work engagement, it did not provide cross-cultural data from different nationalities. Thus, future researchers can examine the leaders' authenticity, employees' PsyCap and the JD-R theory in different cultures. Cultural values, organisational core values, principles and other distinct values can be considered as the main variables.

Lastly, the data were collected from a state-owned enterprise, which may have limited the study generalisation to other organisations. Future studies should consider the type of

organisation and perhaps test the moderating effect of organisation types. Therefore, replicating this empirical study in other organisations can contribute significantly to leadership and organisational studies.

Conclusion

This study concludes that the JD-R model fits the empirical findings as authentic leadership and PsyCap predict work engagement through job satisfaction. Nevertheless, the effect of authentic leadership on work engagement was fully mediated by job satisfaction while that for PsyCap was partially mediated. Although the opponents have addressed some concerns related to the universal application of authenticity, this study provided an alternative explanation regarding the effect of authenticity and PsyCap on employees' positive outcomes. Authentic leadership and PsyCap together satisfy employees' positive resources and leverage their work engagement. The distinct values and the implicit carry-over of the *Bugis* culture in Indonesia did not hinder the effects of authentic leadership and PsyCap.

References

- Adil, A. and Kamal, A. (2016), "Impact of psychological capital and authentic leadership on work engagement and job related affective well-being", *Pakistan Journal of Psychological Research*, Vol. 31 No. 1, pp. 1-21.
- Agrawal, N.M., Khatri, N. and Srinivasan, R. (2012), "Managing growth: human resource management challenges facing the Indian software industry", *Journal of World Business*, Elsevier, Vol. 47 No. 2, pp. 159-166.
- Alarcon, G.M. and Edwards, J.M. (2011), "The relationship of engagement, job satisfaction and turnover intentions", *Stress and Health*, Vol. 27 No. 3, pp. 294-298.
- Algera, P.M. and Lips-wiersma, M. (2012), "Radical Authentic Leadership: Co-creating the conditions under which all members of the organization can be authentic", *The Leadership Quarterly*, Elsevier, Vol. 23 No. 1, pp. 118-131.
- Alok, K. and Israel, D. (2012), "Authentic leadership & work engagement", *Indian Journal of Industrial Relations*, Vol. 47 No. 3, pp. 498-510.
- Amunkete, S. and Rothmann, S. (2015), "Authentic leadership, psychological capital, job satisfaction and intention to leave in state-owned enterprises", *Journal of Psychology in Africa*, Vol. 25 No. 4, pp. 271-281.
- Antunes, A.C., Caetano, A. and Pina e Cunha, M. (2017), "Reliability and construct validity of the Portuguese version of the psychological capital questionnaire", *Psychological Reports*, Vol. 120 No. 3, pp. 520-536.
- Avey, J.B., Reichard, R.J., Luthans, F. and Mhatre, K.H. (2011), "Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance", *Human Resource Development Quarterly*, Vol. 22 No. 2, pp. 127-152.
- Avolio, B.J. and Gardner, W.L. (2005), "Authentic leadership development: getting to the root of positive forms of leadership", *The Leadership Quarterly*, Vol. 16 No. 3, pp. 315-338.
- Avolio, B.J., Walumbwa, F.O. and Weber, T.J. (2009), "Leadership: current theories, research, and future", *Annual Review of Psychology*, Vol. 60 No. 1, pp. 421-449.
- Azanza, G., Moriano, J.A. and Molero, F. (2013), "Authentic leadership and organizational culture as drivers of employees' job satisfaction", *Revista de Psicología Del Trabajo Y De Las Organizaciones*, Elsevier, Vol. 29 No. 2, pp. 45-50.
- Aziri, B. (2011), "Job Satisfaction: a literature review", *Management Research and Practice*, Vol. 3 No. 4, pp. 77-86.
- Badran, M.A. and Youssef-Morgan, C.M. (2015), "Article information", *Journal of Managerial Psychology*, Vol. 30 No. 3, pp. 354-370.

-
- Bakker, A.B. and Demerouti, E. (2007), "The job demands-resources model: state of the art", *Journal of Managerial Psychology*, Vol. 22 No. 3, pp. 309-328.
- Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13 No. 3, pp. 209-223.
- Bakker, A.B., Schaufeli, W.B., Leiter, M.P. and Taris, T.W. (2008), "Work engagement: an emerging concept in occupational health psychology", *Work and Stress*, Vol. 22 No. 3, pp. 187-200.
- Bakker, A.B. (2011), "An evidence-based model of work engagement", *Current Directions in Psychological Science*, Vol. 20 No. 4, pp. 265-269.
- Bakker, A.B. (2017), "Job crafting among health care professionals: the role of work engagement", *Journal of Nursing Management*, Vol. 26 No. 3, pp. 321-331.
- Bamford, M., Wong, C.A. and Laschinger, H. (2013), "The influence of authentic leadership and areas of worklife on work engagement of registered nurses", *Journal of Nursing Management*, Vol. 21 No. 3, pp. 529-540.
- Bergheim, K., Nielsen, M.B., Mearns, K. and Eid, J. (2015), "The relationship between psychological capital, job satisfaction, and safety perceptions in the maritime industry", *Safety Science*, Elsevier, Vol. 74 No. 1, pp. 27-36.
- Bitmiş, M.G. and Ergeneli, A. (2013), "The role of psychological capital and trust in individual performance and job satisfaction relationship: a test of multiple mediation model", *Procedia - Social and Behavioral Sciences*, Vol. 99, pp. 173-179.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O.K. and Espevik, R. (2014), "Daily transactional and transformational leadership and daily employee engagement", *Journal of Occupational and Organizational Psychology*, Vol. 87 No. 1, pp. 138-157.
- Breevaart, K., Bakker, A.B., Demerouti, E. and Derks, D. (2016), "Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance", *Journal of Organizational Behavior*, Vol. 37 No. 1, pp. 309-325.
- Campion, M.C., Schepker, D.J., Campion, M.A. and Sanchez, J.I. (2020), "Competency modeling: a theoretical and empirical examination of the strategy dissemination process", *Human Resource Management*, Vol. 59 No. 3, pp. 291-306.
- Caza, A., Bagozzi, R.P., Woolley, L., Levy, L. and Caza, B.B. (2010), "Psychological capital and authentic leadership: measurement, gender, and cultural extension", *Asia-Pacific Journal of Business Administration*, Vol. 2 No. 1, pp. 53-70.
- Chamundeswari, S. (2013), "Job satisfaction and performance of school teachers", *International Journal of Academic Research in Business and Social Sciences*, Vol. 3 No. 5, pp. 420-428.
- Chaurasia, S. and Shukla, A. (2014), "Psychological capital, LMX, employee engagement & work role performance", *Indian Journal of Industrial Relations*, Vol. 50 No. 2, pp. 342-357.
- Chen, S.-L. (2015), "The relationship of leader psychological capital and follower psychological capital, job engagement and job performance: a multilevel mediating perspective", *International Journal of Human Resource Management*, Vol. 26 No. 18, pp. 1-17.
- Clapp-Smith, R., Vogelgesang, G.R. and Avey, J.B. (2009), "Authentic leadership and positive psychological capital", *Journal of Leadership and Organizational Studies*, Vol. 15 No. 3, pp. 227-240.
- De Waal, J.J. and Pienaar, J. (2013), "Towards understanding causality between work engagement and psychological capital", *SA Journal of Industrial Psychology*, Vol. 39 No. 2, doi: [10.4102/sajip.v39i2.1113](https://doi.org/10.4102/sajip.v39i2.1113).
- Eagly, A.H. and Karau, S.J. (2002), "Role congruity theory of prejudice toward female leaders", *Psychological Review*, Vol. 109 No. 3, pp. 573-598.
- Eagly, A.H. (2007), "Female leadership and advantage and disadvantage: resolving the contradictions", *Psychology of Women Quarterly*, Vol. 31 No. 1, pp. 1-12.
- Froese, F.J. and Xiao, S. (2012), "Work values, job satisfaction and organizational commitment in China", *International Journal of Human Resource Management*, Vol. 23 No. 10, pp. 2144-2162.

-
- Gardner, W.L., Cogliser, C.C., Davis, K.M. and Dickens, M.P. (2011), "Authentic leadership: a review of the literature and research agenda", *The Leadership Quarterly*, Elsevier, Vol. 22 No. 6, pp. 1120-1145.
- Gruman, J.A. and Saks, A.M. (2011), "Performance management and employee engagement", *Human Resource Management Review*, Vol. 21 No. 2, pp. 123-136.
- Harms, P.D., Credi, M., Tynan, M., Leon, M. and Jeung, W. (2017), "Leadership and stress: a meta-analytic review", *The Leadership Quarterly*, Elsevier, Vol. 28 No. 1, pp. 178-194.
- Herzberg, F. (1968), "One more time: how do you motivate employees?", *Harvard Business Review*, Vol. 46 No. 1, pp. 53-62.
- Jones, M.K., Jones, R.J., Latreille, P.L. and Sloane, P.J. (2009), "Training, job satisfaction, and workplace performance in Britain: evidence from WERS 2004", *Labour*, Vol. 23 No. Suppl. 1, pp. 139-175.
- Jufri, M. and Wirawan, H. (2018), "Internalizing the spirit of entrepreneurship in early childhood education through traditional games", *Education and Training*, Vol. 60, doi: [10.1108/ET-11-2016-0176](https://doi.org/10.1108/ET-11-2016-0176).
- Kaliski, S.F. (1976), "People, Jobs, and the 'New Unemployment'", *Canadian Public Policy/Analyse de Politiques*, Vol. 2 No. 3, pp. 497-503.
- Karatepe, M.O. and Karadas, G. (2015), "Do psychological capital and work engagement foster frontline employees' satisfaction?: a study in the hotel industry", *International Journal of Contemporary Hospitality Management*, Vol. 27 No. 6, pp. 1254-1278.
- Kong, F., Tsai, C., Tsai, F. and Huang, W. (2018), "Psychological capital research: a meta-analysis and implications for management sustainability", *Sustainability*, Vol. 10 No. 3457, pp. 1-9.
- Kramar, R. (2014), "Beyond strategic human resource management: is sustainable human resource management the next approach?", *International Journal of Human Resource Management*, Vol. 25 No. 8, pp. 1069-1089.
- Larson, M. and Luthans, F. (2006), "Potential added value of psychological capital in predicting work attitudes", *Journal of Leadership and Organizational Studies*, Vol. 13 No. 1, pp. 45-62.
- Laschinger, H.K.S. and Fida, R. (2014), "New nurses burnout and workplace wellbeing: the influence of authentic leadership and psychological capital", *Burnout Research*, Elsevier GmbH, Vol. 1 No. 1, pp. 19-28.
- Liu, Y. and Cohen, A. (2010), "Values, commitment, and OCB among Chinese employees", *International Journal of Intercultural Relations*, Elsevier, Vol. 34 No. 5, pp. 493-506.
- Locke, E.A. (1969), "What is job satisfaction?", *Organizational Behavior and Human Performance*, Vol. 4 No. 4, pp. 309-336.
- Lorenz, T., Beer, C., Pütz, J. and Heinitz, K. (2016), "Measuring psychological capital: construction and validation of the compound PsyCap scale (CPC-12)", *PloS One*, Vol. 11 No. 4, pp. 1-17.
- Luthans, F. and Avolio, B.J. (2003), "Authentic leadership development", in Quinn, R.E., Dutton, J.E. and Cameron, K.S. (Eds), *Positive Organizational Scholarship: Foundations of a New Discipline*, Barrett-Koehler Publishers, pp. 241-271.
- Luthans, F., Avey, J.B., Avolio, B.J., Norman, S.M. and Combs, G.M. (2006), "Psychological capital development: toward a micro-intervention", *Journal of Organizational Behavior*, Vol. 27 No. 3, pp. 387-393.
- Luthans, F., Avolio, B.J. and Norman, S.M. (2007), "Positive psychological capital: measurement and relationship with performance and satisfaction", *Personnel Psychology*, Vol. 60 No. 3, pp. 541-572.
- Luthans, F., Youssef-Morgan, C.M. and Avolio, B.J. (2015), *Psychological Capital and Beyond*, Oxford University Press, New York.
- MacKenzie, S. and Podsakoff, P. (2012), "Common method bias: nature, causes, and procedural remedies", *Journal of Retailing*, Vol. 88 No. 4, pp. 542-555, doi: [10.1016/j.jretai.2012.08.001](https://doi.org/10.1016/j.jretai.2012.08.001).

- Neider, L.L. and Schriesheim, C.A. (2011), "The authentic leadership inventory (ALI): development and empirical tests", *The Leadership Quarterly*, Elsevier B.V., Vol. 22 No. 6, pp. 1146-1164.
- Newman, A., Ucbasaran, D., Zhu, F.E.I. and Hirst, G. (2014), "Psychological capital: a review and synthesis", Vol. 138 No. 5, pp. 120-139.
- Nyberg, D. and Sveningsson, S. (2014), "Paradoxes of authentic leadership: leader identity struggles", *Leadership*, Vol. 10 No. 4, pp. 437-455.
- Oh, J., Cho, D. and Lim, D.H. (2017), "Authentic leadership and work engagement: the mediating effect of practicing core values", *The Leadership and Organization Development Journal*, Vol. 39 No. 2, pp. 276-290.
- Peterson, S.J., Walumbwa, F.O., Avolio, B.J. and Hannah, S.T. (2012), "The relationship between authentic leadership and follower job performance: the mediating role of follower positivity in extreme contexts", *The Leadership Quarterly*, Vol. 23 No. 3, pp. 502-516.
- Rego, P., Lopes, M.P. and Nascimento, J.L. (2016), "Authentic leadership and organizational commitment: the mediating role of positive psychological capital", *Journal of Industrial Engineering and Management*, Vol. 9 No. 1, doi: [10.3926/jiem.1540](https://doi.org/10.3926/jiem.1540).
- Rew, L., Thompson, S., Brown, A. and Seo, E. (2014), "An intervention to enhance psychological capital in homeless females: preliminary findings", *Journal of Adolescent Health*, Elsevier, Vol. 54 No. 2, p. S13.
- Saari, L.M. and Judge, T.A. (2004), "Employee attitudes and job satisfaction", *Human Resource Management*, Vol. 43 No. 4, pp. 395-407.
- Salanova, M., Agut, S. and Peiró, J.M. (2005), "Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1217-1227.
- Schaufeli, W.B. and Bakker, A.B. (2003), "Utrecht work engagement scale: preliminary manual", *Occupational Health Psychology Unit, Utrecht University, Utrecht*, Vol. 26 No. 1, pp. 64-100.
- Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315.
- Shaw, J. (2010), "Papering the cracks with discourse: the narrative identity of the authentic leader", *Leadership*, Vol. 6 No. 1, pp. 89-108.
- Simons, J.C. and Buitendach, J.H. (2013), "Psychological capital, work engagement and organisational commitment amongst call centre employees in South Africa", *SA Journal of Industrial Psychology*, Vol. 39 No. 2, pp. 1-12.
- Stewart, D., Verbos, A.K., Birmingham, C. and Black, S.L. (2017), "Being Native American in business: culture, identity, and authentic leadership in modern American Indian enterprises", *Leadership*, Vol. 13 No. 5, pp. 549-570.
- Tamar, M., Wirawan, H. and Sudirman, S. (2017), "Buginese culture value system scale for entrepreneur and its transforming local values to a psychometric scale", *2nd International Conference on Education, Science, and Technology (ICEST 2017)*, Vol. 149, pp. 67-69.
- Tamar, M., Wirawan, H. and Bellani, E. (2019), "The Buginese entrepreneurs; the influence of local values, motivation and entrepreneurial traits on business performance", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 13 No. 4, pp. 438-454.
- Thompson, K.R., Lemmon, G. and Walter, T.J. (2015), "Employee engagement and positive psychological capital", *Organizational Dynamics*, Elsevier, Vol. 44 No. 3, pp. 185-195.
- Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011), "Do transformational leaders enhance their followers' daily work engagement?", *The Leadership Quarterly*, Vol. 22 No. 1, pp. 121-131.
- Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S. and Peterson, S.J. (2008), "Authentic leadership: development and validation of a theory-based measure", *Journal of Management*, Vol. 34 No. 1, pp. 89-126.

- Walumbwa, F.O., Wang, P., Wang, H., Schaubroeck, J. and Avolio, B.J. (2010), "Psychological processes linking authentic leadership to follower behaviors", *The Leadership Quarterly*, Elsevier, Vol. 21 No. 5, pp. 901-914.
- Wang, D.-S. and Hsieh, C.-C. (2013), "The effect of authentic leadership on employee trust and employee engagement", *Social Behavior and Personality*, Vol. 41 No. 4, pp. 613-624.
- Wang, D., Waldman, D.A. and Zhang, Z. (2014a), "A meta-analysis of shared leadership and team effectiveness", *Journal of Applied Psychology*, Vol. 99 No. 2, pp. 181-198.
- Wang, H.U.I., Sui, Y., Luthans, F., Wang, D. and Wu, Y. (2014b), "Impact of authentic leadership on performance : role of followers' positive psychological capital and relational processes", *Journal of Organizational Behavior*, Vol. 21, pp. 5-21.
- Wefald, A.J. and Downey, R.G. (2010), "Construct dimensionality of engagement and its relation with satisfaction construct dimensionality of engagement and its relation with satisfaction", *The Journal of Psychology: Interdisciplinary and Applied*, Vol. 143 No. 1, pp. 37-41.
- Weiss, D.J., Dawis, R., England, G. and Lofquist, L. (1967), "Manual for the Minnesota satisfaction questionnaire", *Minnesota Studies in Vocational Rehabilitation*, No. 2, pp. 120-180.
- Wernsing, T. (2014), "Psychological capital: a test of measurement invariance across 12 national cultures", *Journal of Leadership and Organizational Studies*, Vol. 21 No. 2, pp. 179-190.
- Woolley, L., Caza, A. and Levy, L. (2011), "Authentic leadership and follower development: psychological capital, positive work climate, and gender", *Journal of Leadership and Organizational Studies*, Vol. 18 No. 4, pp. 438-448.
- Wright, T.A. and Cropanzano, R. (2000), "Psychological well-being and job satisfaction as predictors of job performance", *Journal of Occupational Health Psychology*, Vol. 5 No. 1, pp. 84-94.
- Yeh, C.M. (2013), "Tourism involvement, work engagement and job satisfaction among frontline hotel employees", *Annals of Tourism Research*, Vol. 42 No. 1, pp. 214-239.
- Youssef-Morgan, C.M. and Luthans, F. (2015), "Psychological capital and well-being", *Stress and Health*, Vol. 31 No. 3, pp. 180-188.

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