

How engaging leaders foster employees' work engagement

Engaging
leaders
foster work
engagement

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Abstract

Purpose – The current study investigates the mediating role of job resources (JRs) (i.e. person–ob fit, value congruence, alignment, job control, use of skills, participation in decision-making, coworker support and performance feedback) and basic psychological need satisfaction at work (i.e. autonomy, relatedness, competence and meaningfulness) in the relationship between engaging leadership (EL) (i.e. inspiring, strengthening, empowering and connecting) and work engagement.

Design/methodology/approach – Structural equation analysis was used to test the mediation hypotheses, using a two-wave longitudinal design and an Indonesian sample of 412 employees from an agribusiness state-owned company.

Findings – The results show that EL at baseline 2017 (T1) predicts T1–T2 increase in work engagement (WE) directly, as well as indirectly through T1 JRs, and T1–T2 increase in basic psychological need satisfaction.

Originality/value – This research extends the job demands-resources (JD-R) model by showing the important role of EL for fostering WE through increasing JRs and satisfying basic psychological needs at work.

Keywords Engaging leadership, Job resources, Basic psychological need satisfaction, Work engagement, Longitudinal study

Paper type Research paper

Introduction

Various leadership styles – such as transformational leadership, servant leadership, authentic leadership and ethical leadership – were found to have a positive relationship to work engagement (DeCuyper and Schaufeli, 2020). However, none of these leadership styles were conceived explicitly to increase employees' work engagement (WE). Is there any specific type of leadership that fosters employees' WE? In the current study, we answer this question by introducing a novel alternative leadership style, developed specifically to stimulate employees' WE.

Moreover, mainstream leadership studies have focused on increasing employees' performance or ensuring that employees exert their maximum effort on works, whereby overperformance may cause poor well-being (Nielsen and Taris, 2019). These authors suggested that though efforts have been taken to develop leadership concepts that also focus on employees' health and well-being, some questions remain unanswered about which specific leadership characteristics promote employee health and well-being. Therefore, the current study proposes a particular type of leadership that focuses primarily on employee well-being, that is WE.

WE—a positive, fulfilling, work-related state of mind characterized by vigor, dedication and absorption (Schaufeli *et al.*, 2002, p. 74)—is a popular, prominent and widely recognized



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as a positive job-related psychological state in both business and academia. WE has been promoted as a valuable competitive advantage in organizations across multiple levels (Christian *et al.*, 2011).

The increased amount of research and practices on WE has also boosted the search for its antecedents. Most studies use the job demands-resources (JD-R) model (Schaufeli and Bakker, 2004) to investigate WE (Bailey *et al.*, 2017), suggesting that the interaction between employees' job demands and resources fosters WE. Moreover, in addition to the JD-R model, previous studies emphasized the role of leadership as a crucial antecedent for employees' WE, such as transformational leadership and leader-member exchange (Tims *et al.*, 2011; Vincent-Höper *et al.*, 2012; Breevaart *et al.*, 2015; Hawkes *et al.*, 2017).

The JD-R model has been criticized for being a descriptive framework rather than an explanatory framework, meaning that the JD-R model requires other psychological theories to explain and understand the underlying processes involved (Schaufeli and Taris, 2014). Similarly, previously established broad leadership concepts did not provide a detailed theoretical description of the underlying processes. A study of self-efficacy as a mediator of transformational leadership and engagement found that while the direct effect of transformational leadership on engagement is strong, yet self-efficacy demonstrates only a small part of the relationship (Prochazka *et al.*, 2017). Thus, although transformational leadership could be the most applicable leadership framework for understanding WE (Shuck and Herd, 2012), the theoretical framework of transformational leadership has been questioned (Van Knippenberg and Sitkin, 2013). This means that leadership concept cannot sufficiently explain how each of their dimensions, for example, is specifically related to WE. Regardless of having a specific purpose to foster engagement, the established leadership concepts, such as transformational, transactional and servant leadership, also relate to other, broader outcomes like job performance, job satisfaction and so on. Thus, a specific, theory based and more narrowly defined leadership style, dubbed engaging leadership (EL), was introduced (Schaufeli, 2015).

This current study aims to empirically test how EL impacts employees' WE over time. The JD-R model is used as an overall conceptual framework (Bakker and Demerouti, 2007; 2017) in which EL, rooted in the Self-Determination Theory (SDT) (SDT; Deci and Ryan, 2000), is integrated. The added value of the current study is that it highlights the validity of the EL concept as the new, specific and alternative leadership style by showing that it impacts WE over time through increased JRs (as predicted by the JD-R model) and the satisfaction of basic psychological needs (as predicted by SDT).

Conceptual framework

Work engagement, JD-R and leadership

WE is described as an affective-motivational state where employees feel energetic (vigor), committed and enthusiastic (dedication) and are completely immersed in their work activities (absorption). Nurturing engaged workers is paramount for organizations (Schaufeli, 2012), as not only do engaged workers perform well at the individual level (Halbesleben and Wheeler, 2008; Bakker, 2011) and team level (Torrente *et al.*, 2012; Salanova *et al.*, 2014) but also engaged workforces increase business performance (Schneider *et al.*, 2009; Schneider *et al.*, 2017).

The JD-R model is currently the most often used conceptual framework in occupational health psychology, particularly for studying WE (Bailey *et al.*, 2017). The JD-R model is a heuristic framework that describes how burnout and WE may be produced by two specific sets of work characteristics, namely job demands and JRs (Schaufeli *et al.*, 2009). Job demands are defined as "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological

and psychological costs” (Demerouti *et al.*, 2001, p. 501). In contrast, JRs are defined as “those physical, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands and the associated physiological and psychological costs; (c) stimulate personal growth and development” (Demerouti *et al.*, 2001, p. 501).

According to the JD-R model, WE mediates the effects of JRs on positive outcomes, as JRs are assumed to have inherent motivational qualities, whereas burnout mediates the effects of job demands on negative outcomes (i.e. health problems) (Bakker and Demerouti, 2017). The former is called the motivational process, *which is the focus of the current study*, while the latter is known as the health impairment process.

However, as previously noted, the JD-R model has been criticized for being a descriptive framework rather than an explanatory framework, meaning that other psychological theories should be used to explain and understand the underlying psychological processes (Schaufeli and Taris, 2014). For instance, previous studies used the conservations of resource theory (Xanthopoulou *et al.*, 2009), social cognitive theory (Salanova *et al.*, 2011), broaden and build theory (Ouweneel *et al.*, 2011) and emotional contagion theory (Bakker *et al.*, 2007a, b). In the current study, we use SDT (SDT; Deci and Ryan, 2000) to understand the underlying mechanism that might explain the relationship between EL and WE.

The first pathway assumes that EL predicts future WE through the satisfaction of basic psychological needs (see below). In addition, we also followed the reasoning of Schaufeli (2015), who integrated leadership into the JD-R model based on the principle that leaders are supposed to provide and allocate JRs of their followers in such a way that they remain healthy, motivated and productive. Hence, the second pathway assumes that EL predicts future WE through increasing follower’s JRs. Thus, taken together, we expect that engaging leaders positively and indirectly influence their employees’ WE via JRs and basic need satisfaction (BNS).

Basic needs and engaging leadership

The concept of EL is firmly rooted in SDT Deci and Ryan (2000). SDT is an extensively used and an empirically tested theory of human motivation and optimal functioning which was also applied in occupational health psychology (Van den Broeck *et al.*, 2008). SDT (Deci and Ryan, 2000) was used as the main theory as previous research showed that basic psychological need satisfaction at work is positively related to WE (Schreurs *et al.*, 2014; Sulea *et al.*, 2015; Van den Broeck *et al.*, 2008).

Basic psychological needs are defined as “those nutriments that must be procured by a living entity to maintain its growth, integrity, and health” (Deci and Ryan, 2000, p. 326). Three innate psychological needs are postulated in SDT, the need for autonomy, relatedness and competence; these needs are considered crucial for individuals’ optimal and healthy functioning (Deci and Ryan, 2000). Additionally, a fourth basic need, namely the need for meaningfulness, is introduced and described as the desire to perceive one’s work as particularly meaningful and significant (Baumeister, 1991; Frankl, 1992). Although the need for meaningfulness has not been identified as a separate basic need by SDT so far, theoretical and empirical arguments have been proposed in its favor (e.g. Andersen *et al.*, 2000; Hadden and Smith, 2019).

Schaufeli (2015) proposed four components of EL: empowering, connecting, strengthening and inspiring, which may facilitate the satisfaction of the employees’ four basic psychological needs, namely autonomy, relatedness, competence and meaningfulness, respectively. It is assumed that, by satisfying their basic psychological needs, leaders enhance their employees’ levels of engagement.

Previous research found that managerial autonomy support was associated with need satisfaction among employees in both the US and Bulgaria and that need satisfaction, in turn,

was associated with both task engagement and employee well-being (Deci *et al.*, 2001). Correspondingly, research on servant leadership, a positive leadership concept somewhat similar to EL, showed that followers' psychological need satisfaction mediates the influence of this leadership style on WE (van Dierendonck *et al.*, 2014). Finally, Rahmadani *et al.* (2019) found that indeed basic psychological need satisfaction mediates the relationship between EL and WE, in both Indonesian and Russian sample. Although earlier research suggests that basic psychological need satisfaction might play a mediating role, a firm conclusion cannot be drawn yet because all previous studies were cross-sectional in nature.

Job resources and engaging leadership

The more JRs employees can draw upon, the more likely they are to be engaged, as postulated by the motivational process of the JD-R model (Halbesleben, 2010). JRs not only help employees to achieve their work goals but also stimulate their personal growth and development and boost their wellbeing (Bakker, 2010). Previous research found that JRs are positively related to engagement and that these relationships are fairly consistent across various types of resources, such as job autonomy, feedback, opportunities for development, rewards and recognition, job variety and person-role fit (Crawford *et al.*, 2010).

As far as longitudinal research is concerned, Hakanen *et al.* (2008) found that JRs influenced future WE, which, in turn, predicted organizational commitment. Schaufeli *et al.* (2009) also found that increase in JRs predicted future WE; their results suggested a positive gain spiral in which initial WE predicts an increase in JRs, which, in turn, increases WE. Thus, it seems that, over time, JRs predict WE (see also; Hakanen *et al.*, 2008; Salanova *et al.*, 2010; Simbula *et al.*, 2011).

Moreover, leaders play a vital role in creating a resourceful work environment, which also may indirectly influence employees' WE and performance (Breevaart and Bakker, 2013; Breevaart, *et al.*, 2015; Bakker and Demerouti, 2017). The satisfaction of basic psychological needs (partially) mediates the effect of JRs on engagement (vigor) (Van den Broeck *et al.*, 2008); JRs are inherently motivating because they fulfill basic human needs as stipulated by SDT (Deci and Ryan, 2000). Indeed, Van Wingerden (2018) found that satisfaction of needs plays a crucial role in the relationship between JRs and WE. Hence, it can be argued that JRs, which, to at least some extent, depend on the employees' supervisor and which are instrumental in satisfying employees' basic psychological needs (Deci *et al.*, 2001), foster employees' WE.

Previous cross-sectional studies found significant relationships between EL and WE through JRs (Schaufeli, 2015; Nikolova *et al.*, 2019) as well as through basic psychological need satisfaction (Rahmadani *et al.*, 2019). In sum, engaging leaders might also increase WE indirectly by providing JRs as well as fulfilling employees' basic needs. However, the empirical evidence is preliminary, as it is based on cross-sectional studies. Therefore, in this study, we use a longitudinal design to test both mediation effects of JRs and basic psychological need satisfaction. More particularly, we investigate the role of EL and JRs in predicting future basic psychological need satisfaction and WE.

Building upon the motivational process of JD-R model and SDT, we argue that increasing EL and increasing JRs may predict employees' future basic psychological need satisfaction and, subsequently, their level of WE. More specifically, we hypothesize the following:

- H1. T1 EL predicts an increase in WE between T1 and T2 via an increase in basic psychological need satisfaction between T1 and T2.
- H2. T1 EL predicts an increase in basic psychological need satisfaction between T1 and T2 via T1 JRs.

- H3. T1 JRs predict an increase in WE between T1 and T2 via an increase in basic psychological need satisfaction between T1 and T2.
- H4. T1 EL predicts an increase in WE between T1 and T2 via JRs at T1 and via an increase in basic psychological need satisfaction between T1 and T2.

Method

Sample and procedure

Data were collected in 2017 (T1) and 2018 (T2) of 412 Indonesian employees in an agribusiness state-owned company. This company operates nine districts and owns 41 plantations and operates in the cultivation, production, sale and export of palm oil and rubber products. Conveniently selected, 700 employees from several units of 39 plantations in eight districts were invited to participate at T1. In total, 611 participants returned the survey (response rate 87.3%); due to incomplete data of four participants, 607 cases remained for T1. At T2, 533 out of 607 participants returned the survey (response rate 87.8%). However, only for 435 participants T2 data could be matched with the previous survey using a unique assigned code that was only known to the participants. Due to incomplete data of 23 participants, 412 employees were included for further analysis.

All participants were males with 4.6% in the age group less than 30 years old, 20.1% was aged between 31 and 39 years, 43.9% between 40 and 49 years and 31.3% was aged over 50 years. Moreover, 21.6% completed elementary education, 62.9% completed secondary education, 15% had a bachelor's degree and 0.5% had a master's degree; more than half of the participants (54.4%) had over 20 years of job tenure.

At T1 and T2, the survey was handed by distribution officers in a sealed envelope to the participants of each site during work hours. Participants received a written description of the study along with informed consent for the survey. The surveys were completed within two weeks and handed to the research assistant in a sealed envelope. Participation was voluntary and the anonymity of the data was guaranteed, by using individually assigned codes for linking data of both waves.

Measures

Self-reported five-point Likert frequency scales were used, and all items were translated from English into Bahasa Indonesia following a double translation procedure (Brislin, 1970).

Engaging leadership (EL) was measured by the 12 items of EL scale (Schaufeli, 2015; Rahmadani et al., 2019), which assesses four aspects of EL with three items each; strengthening, connecting, empowering and inspiring. The values of Cronbach's alpha for EL at T1 and T2 were 0.86 and 0.86, respectively.

Job resources (JRs) were assessed with three subscales which based on three factors [1] emerged from exploratory factor analysis of all eight JRs scales: (1) *Organizational resources* consist of person–job fit, value congruence and alignment, and the values of Cronbach's alpha T1 and T2 were 0.76 and 0.77, respectively. (2) *Work-related resources* consist of use of skills, participation in decision-making and job control, and the values of Cronbach's alpha at T1 and T2 were 0.78 and 0.78, respectively. (3) *Social resources* consist of coworker support and performance feedback, and the values of Cronbach's alpha at T1 and T2 were 0.76 and 0.76, respectively.

Basic psychological need satisfaction (BNS) was assessed for the needs for autonomy, relatedness, competence and meaningfulness. The first three psychological needs are based on the BNS at the work scale (Van den Broeck et al., 2008). The fourth basic need, meaningfulness, was measured using a self-developed scale (see also Rahmadani et al., 2019). The values of Cronbach's alpha for the total scale at T1 and T2 were 0.79 and 0.77, respectively.

Work engagement (WE) was assessed with the nine-item version of the Utrecht Work Engagement Scale (UWES, [Schaufeli et al., 2006](#)). The UWES assesses three aspects of WE; vigor, dedication and absorption. The values of Cronbach's alpha for the UWES at T1 and T2 were 0.87 and 0.86, respectively.

Results

Preliminary analysis: change scores

T1–T2 changes in BNS and WE were calculated, which then, were included in the structural equation model (SEM). These change scores were obtained by regressing T2 scores of BNS and WE on their corresponding T1 scores by using simple regressions. The higher the resulting standardized residual, the more WE has enhanced, and the more basic needs have been satisfied between T1 and T2.

Preliminary analysis: measurement model

A confirmatory factor analysis (CFA) was conducted to assess the measurement model consisting of four correlated latent variables: (1) T1 EL (a second-order factor represented by its four components); (2) T1 JR (a second-order factor represented by its three components); (3) T1–T2 change in BNS (a second-order factor represented by its four components) and (4) T1–T2 change in WE (a second-order factor represented by its three components). AMOS software ([Arbuckle, 1999](#)) with robust maximum likelihood (MLR) estimation was used for all CFA and SEM analyses.

The measurement model fits the data well with all fit indices meeting their respective criteria ($\chi^2 = 130.82$, $df = 7$, $p = 0.00$, $RMSEA = 0.04$, $SRMR = 0.02$, $GFI = 0.96$, $AGFI = 0.94$, $NFI = 0.92$, $TLI = 0.95$, $CFI = 0.96$). [Table 1](#) presents the mean scores, standard deviations and correlations between the study variables.

Hypothesis testing

To test all four mediation hypotheses, the 2000-bootstrap indirect effect with 95% bias-corrected method was performed by using SEM analyses. Moreover, to test the multiple mediation of [Hypothesis 4](#), the following structural paths were specified and tested: Δ EL–JR, Δ JR–BNS and Δ BNS–WE. The hypothesized model fits the data well with all fit indices meeting their respective criteria with all path coefficients being positively significant, except the direct path from T1 EL to the change in BNS ($\beta = 0.06$, n.s.) and that of T1 JR to the change in WE ($\beta = -0.09$, n.s.). Our hypothesized SEM is described graphically in [Figure 1](#), and the standardized coefficients for CFA are depicted in [Table 2](#).

Direct and indirect effects of engaging leadership on change in work engagement

EL at T1 predicts an increase in WE ($\beta = 0.19$, $p < 0.05$) and is positively associated with JR at T1 ($\beta = 0.64$, $p < 0.01$). As expected, T1 JR ($\beta = 0.16$, $p < 0.05$) mediates the positive impact of T1 EL on the increase in BNS between T1 and T2 since no significant direct effect was obtained between EL and BNS ($\beta = 0.06$, $p > 0.05$). Since EL at T1 does not predict the T1–T2 change in BNS, [Hypothesis 1](#) (stating that BNS mediates the relationship between EL and WE), is *not confirmed*. However, T1 JR fully mediates the relationship between T1 EL and the T1–T2 change in BNS, meaning that [Hypothesis 2](#) is *confirmed*.

Furthermore, T1 JR predicts an increase in BNS between T1 and T2 ($\beta = 0.25$, $p < 0.05$), and this change in BNS is positively related to an increase in WE between T1 and T2 ($\beta = 0.35$, $p < 0.001$). T1 JR predicts the T1–T2 change in WE, as mediated by the T1–T2 change in BNS ($\beta = 0.09$, $p < 0.05$) as no significant direct effect was obtained between T1 JR on the T1–T2 change in WE ($\beta = 0.09$, $p > 0.05$). Hence, the T1–T2 change in BNS fully

No	Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1	Strengthening T1	3.98	0.57									
2	Connecting T1	4.30	0.47	0.51**								
3	Empowering T1	4.14	0.47	0.49**	0.65**							
4	Inspiring T1	4.24	0.47	0.43**	0.60**	0.56**						
5	Organizational-related job resources T1	3.96	0.51	0.39**	0.37**	0.34**	0.34**					
6	Work-related job resources T1	3.79	0.68	0.30**	0.26**	0.28**	0.23**	0.44**				
7	Social-related job resources T1	3.71	0.63	0.43**	0.35**	0.43**	0.30**	0.42**	0.54**			
8	T1-T2 change in basic need satisfaction	-	0.95	0.16**	0.13**	0.18**	0.12**	0.22**	0.14**	0.17**		
9	T1-T2 change in work engagement	-	0.78	0.09*	0.14**	0.14**	0.10*	0.04	0.09*	0.10*	0.27**	

Note(s): The scores for all variables range from one to five. * $p < 0.05$ and ** $p < 0.01$

Table 1.
Mean (M), standard
deviation (SD),
correlation coefficients
of the study variables

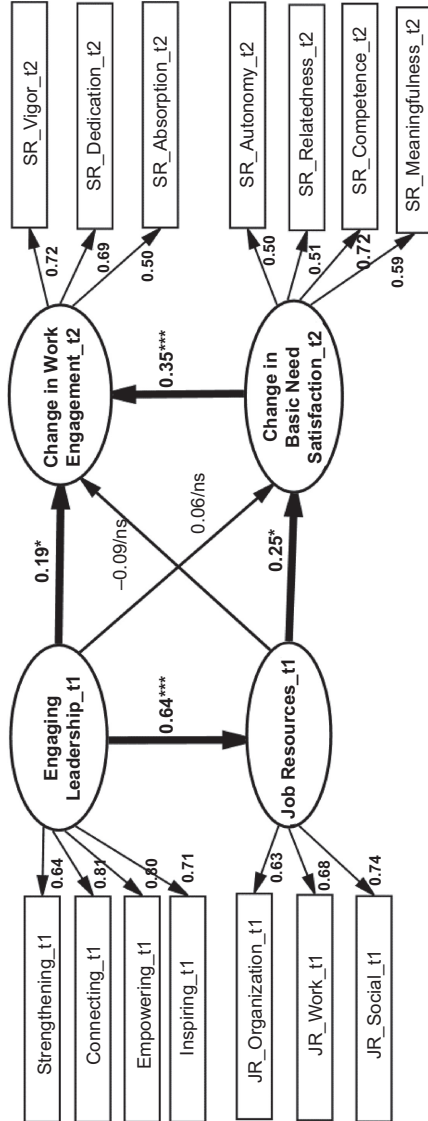


Figure 1.
The standardized path coefficients of the mediation model ($N = 412$)

Table 2.
Standardized and
unstandardized
coefficients for CFA

Observed variable	Latent construct	β	B	SE
Strengthening	Engaging leadership	0.64	1.08	0.08
Connecting	Engaging leadership	0.81	1.14	0.09
Empowering	Engaging leadership	0.80	1.12	0.08
Inspiring	Engaging leadership	0.71	1.00	
JR_ organization	Job resources	0.63	0.71	0.07
JR_work	Job resources	0.68	1.00	0.09
JR_social	Job resources	0.74	1.00	
Autonomy	Basic need satisfaction	0.50	1.00	
Relatedness	Basic need satisfaction	0.51	1.02	0.14
Competence	Basic need satisfaction	0.72	1.39	0.17
Meaningfulness	Basic need satisfaction	0.69	1.18	0.15
Vigor	Work engagement	0.72	1.00	
Dedication	Work engagement	0.69	1.02	0.12
Absorption	Work engagement	0.50	0.73	0.09

mediates the relationship between T1 JR and the T1–T2 change in WE relationship (*Hypothesis 3 is confirmed*).

Lastly, T1 EL increases WE between T1 and T2 as mediated by T1 JR as well as BNS between T1 and T2 ($\beta = 0.12, p < 0.05$). Since T1 EL also predicts WE between T1 and T2 ($\beta = 0.19, p < 0.05$), partial mediation is observed, so that *Hypothesis 4 is partly supported*. Comparing the direct and indirect effects of T1 EL on the T1–T2 change in WE, it seems that the direct effect ($\beta = 0.19, p < 0.05$) is stronger than the indirect effect ($\beta = 0.12, p < 0.05$). A summary of all results is shown in [Table 3](#).

Discussion

The current study aimed to illuminate the process by which perceived EL results in increased engagement among followers. Based on SDT, it was hypothesized that JRs mediate the relationship between EL and the satisfaction of four basic needs: autonomy, competence, relatedness and meaningfulness (*Hypothesis 1*). Moreover, JRs mediate the relationship between EL and basic need satisfaction (*Hypothesis 2*). Based on the JD-R model, it was hypothesized that basic need satisfaction mediates the relationship between JRs and WE (*Hypothesis 3*). Most importantly, a sequential mediation was predicted: EL increases WE via JRs and basic need satisfaction (*Hypothesis 4*).

Our results, which are based on a two-wave longitudinal study design, confirm [Hypotheses 2 and 3](#) and partly confirm [Hypothesis 4](#). Taken together, these results suggest that EL predicts an increase in WE across a one-year period, both directly and indirectly, through JRs and subsequent basic need satisfaction. These results are in line with previous cross-sectional findings showing that EL is positively associated with JRs ([Schaufeli, 2015](#); [Nikolova et al., 2019](#)), that JRs are positively associated with BNS ([Van Wingerden et al., 2018](#)) and that BNS is positively associated with WE ([Van den Broeck et al., 2008](#); [Rahmadani et al., 2019](#)).

However, the direct effect of EL on WE is unexpected. A possible explanation of this direct effect is emotional contagion, where leaders directly influence employees' WE through emotional contagion mechanism. A study from [Bakker et al. \(2006\)](#) found emotional contagion as a crucial crossover mechanism that leads to the emergence of a shared psychological state in teams (also related to leadership). In our case, it might be that the engaged leaders influence their followers' engagement through the social interaction with the followers, then from the interaction the state of engagement of the leaders is shared. [Decuyper and Schaufeli \(2020\)](#)

Structural relationships	Unstandardized parameter estimates (B)	Standardized parameter estimates (β)	Unstandardized indirect effects (B')	Standardized indirect effects (β')	R ²
EL_t1 → WE_t2	0.41*	0.19			
JR_t1 → WE_t2	-0.14 (ns)	-0.09			
BNS_t2 → WE_t2	0.48***	0.35			
EL_t1 → BNS_t2	0.10 (ns)	0.06			
JR_t1 → BNS_t2	0.28*	0.25			
EL_t1 → JR_t1	0.89***	0.64			0.41
EL_t1 → BNS_t2 → WE_t2			No mediation		
EL_t1 → JR_t1 → BNS_t2			0.25	0.16*	0.09
JR_t1 → BNS_t2 → WE_t2			0.14	0.09*	0.13
EL_t1 → JR_t1 → BNS_t2 → WE_t2			0.04	0.05*	0.15
<i>Model fit indices</i>					
χ ²	130.82				
Df	7				
GFI, CFI, NFI, AGFI and TLI	0.92–0.96				
SRMR	0.02				
RMSEA	0.05				

Table 3.
The summary of structural equation modeling results

Note(s): EL_t1: engaging leadership time 1; JR_t1: job resources time 1; BNS_t2: change in basic need satisfaction time 2; WE_t2: change in work engagement time 2; χ²: chi-square; GFI: goodness of fit index; CFI: comparative fit index; NFI: normed fit index; AGFI: adjusted goodness of fit index; TLI: Tucker–Lewis index; SRMR: standardized root mean residual and RMSEA: root mean square error of approximation. ****p* < 0.001 and **p* < 0.05

called the direct influence of leaders to followers’ engagement through emotional contagion as an affective interpersonal pathway.

The results are not in line with previous findings that indicate that BNS mediates the relationship between EL and WE (Hypothesis 1). The reason is that in the previous study (Rahmadani *et al.*, 2019), JR were not included. In fact, the results of the current study qualify the findings of Rahmadani *et al.* (2019), in the sense that the current study also finds a positive relationship between EL and BNS, albeit that it is mediated by JR. Also, a similar mediated relationship was found between EL and WE, but the mediation was more complex and involved BNS as well as JR. Thus, the current study emphasizes the crucial role of JR also in relation to BNS.

For the first time, the associations involving BNS have been confirmed using a longitudinal sample. It seems that engaging leaders increase their followers’ levels of JRs, which leads to BNS. This, in turn, is associated with an increase in WE. Tellingly, the grouping of JRs in three domains – organizational, work and social – as previously observed by Schaufeli (2017) was replicated in the current study, which adds to its validity.

Implications

Building upon the JD-R model and SDT, this research confirms and extends the motivational process of the JD-R model in the Indonesian context by adding EL as a specific antecedent of WE rather than including it as one of the JRs. Previous studies showed that supervisory social support, which is included as one of the JRs, is positively related to WE (for instance, Seppälä

et al., 2015; Bakker *et al.*, 2007a, b). In these studies, employees were asked whether or not their supervisor provided help and support when needed. However, the concept of EL goes beyond mere social support to include other aspects of leadership behavior, such as strengthening, empowering and inspiring. We reasoned that one of the roles of leadership is to provide and allocate JRs; in other words, it is the job of the leader to create resourceful jobs for his or her followers (Buckingham and Coffman, 1999).

Our research suggests that such resourceful jobs satisfy the employee's basic needs for autonomy, competence, relatedness and meaningfulness, which, in turn, increase WE. Hence, BNS was identified as an underlying mechanism that may explain the positive effect of EL on WE. It seems, however, that the positive impact of EL on WE is not simply mediated by BNS alone; rather, the picture is more complex. Engaged leaders satisfy their followers' basic needs not directly but indirectly by providing JRs. This result emphasizes the importance of leadership for allocating and increasing JRs.

Our research also contributes to our knowledge about leadership and engagement by introducing a specific, narrow leadership concept that is inherently related to WE. In the current study, we showed that engaging leaders who strengthen, empower, connect and inspire employees have a significant impact on their followers' future levels of WE. Previous studies using other positive leadership concepts also found associations with engagement (see Decuyper and Schaufeli, 2020); however, only few studies have investigated the underlying process in the leadership and engagement relationship. For instance, a study from Hawkes *et al.* (2017) identified workers' growth mindset as the key moderator variable that makes a transformational leadership style more effective in reinforcing proactive personality and engagement relationship. In this study, growth mindset acts as one of personal resources whereas transformational leadership recognizes as one of the JRs, as stipulated by the JD-R model.

In addition to these theoretical implications, our research has two practical implications. First, leadership is the key agent for nurturing employees' WE. Thus, leaders should be aware of their employees' basic needs and consider whether employees can draw upon sufficient JRs to satisfy their basic needs, which eventually might increase their engagement. By regularly communicating with their followers, leaders can monitor the extent to which basic needs for autonomy, competence, relatedness and meaningfulness are fulfilled. When this is not the case to a sufficient degree, leaders should supplement the necessary JRs to ensure BNS. Furthermore, it seems that EL is most strongly correlated with social-related JRs (average 0.40), compared to work related (0.26) and organization related (0.35) resources. This makes sense because leaders are more likely to influence the social resources (they are in control themselves) than the other kinds of resources. Thus, to increase further WE, leaders are expected to regularly provide the social-related resources: support and performance feedback.

Third, leaders, especially direct supervisors, are well-advised to strengthen, empower, connect and inspire their followers to increase their levels of WE. These behaviors can be learned through role modeling, coaching and training. For instance, a recent study found that leadership development training based on the principles of EL (Van Tuin *et al.*, 2019) was successful in reducing the team's absences due to sickness and increasing objective team performance.

Limitations

All variables in this study were assessed using self-reported questionnaires. Consequently, there is a chance that the responses may suffer from common method variance (Podsakoff *et al.*, 2003). However, Spector (2006) has argued that the effect of common method variance is often overestimated in the kind of research we conducted. Additionally, we tested whether an

alternative, one-factor model on which all items were supposed to load would fit the data, the so-called Harman single-factor test (Podsakoff *et al.*, 2003), which is based on CFA. It appeared that the fit to the data of a single latent factor model was rather poor ($\chi^2 = 802.45$, $df = 77$, $GFI = 0.74$, $AGFI = 0.64$, $CFI = 0.55$, $TLI = 0.47$, $RMSEA = 0.15$). Hence, it is unlikely that common method variance might have biased our results. Nevertheless, future research should replicate our findings by using mixed methods and mixed sources of data, for example, by using a behavior checklist to determine engaging behaviors by the leaders themselves or by using independent raters to observe engaging behaviors shown by the leaders (Robijn *et al.*, 2019).

Recommendations for future research

Future studies may explore alternative explanations for the positive relationship between EL and WE. Decuyper and Schaufeli (2020) argued that positive leaders directly influence employee engagement through three pathways: emotional contagion (affective interpersonal pathway), social exchange (cognitive interpersonal pathway) and role modeling (behavioral interpersonal pathway). So, it seems that with our indirect effect (through JRs and BNS), we explained only a (small) part of the effect of EL on WE. Hence, more research is needed (e.g. on emotional contagion and social exchange).

Note

1. The full factor loading matrix can be obtained upon request from the first author.

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