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Innovative behavior among service workers and the importance of leadership: Evidence from an emerging economy

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Innovative behavior among service workers and the importance of leadership: Evidence from an emerging economy

ABSTRACT

This study focuses on how service firms can nurture innovative behavior of employees through the important role of leadership. Despite the growth in innovation research, scholars have been slow to move from an R&D (i.e., technical capital) focus to that focusing on employee innovative behavior. However, organizations' innovation initiatives heavily depend on employee human capital and behavior at work as these are key inputs in the value creation process. We focus on a specific type of leadership, transformational leadership, and explore a nascent employee concept, job embeddedness, to enhance our understanding of the mechanisms and conditions by which leaders may encourage follower innovative behavior. We collected data from employees working in the hotel service sector in Ghana, and analyzed the data using structural equation modelling and Hayes' PROCESS Macro. Our results revealed that leaders can promote innovative behavior among service workers only when the workers are embedded in the organization. Further, our results showed positive relationships between transformational leadership and organizational embeddedness, and organizational embeddedness and innovative behavior. However, we found no evidence to suggest that employees' embeddedness in their community might alter the relationship between organizational embeddedness and innovative behavior. We conclude that to support innovation among employees, the behaviors of leaders are important especially in terms of encouraging employees to proactively embed themselves in their organizations, thereby contributing to the development of the hospitality industry and other service sectors in emerging economies.

Keywords: Innovative behavior, Leadership, Job embeddedness, Emerging economy

JEL Classification: O31, L83, N77

1 Introduction

In the last decade or so, there has been a growing interest among organizations to develop innovative behavior among employees as this behavior has been found to be an important driver of organizational innovation. Innovative behavior is defined as employees' intentional creation, introduction, and application of new ideas within a work role, group or organization, with a view to benefiting the role performance, group or organization (Janssen 2000). According to Chen and Huang (2009), organizations' innovation heavily depends on employee human capital and behavior at work as these are key inputs in the value creation process. Correspondingly, employee innovative behavior has been shown to offer superior organizational productivity (Shalley, Zhou and Oldham 2004), steady growth (Janssen 2005) and competitive advantage (Shih and Susanto 2016). In highly competitive service sectors, previous research points out that promoting innovative behavior helps organizations stay competitive (Shih and Susanto 2016) and adapt quickly to industry changes (Jong and Ruyter 2004).

Despite its increasing prominence, employee innovative behavior has received limited attention among innovation researchers (Link 2019) as the majority of studies have focused on R&D [i.e., technical capital] (e.g., Medda 2020; Wang, Xiao and Savin 2020; Wu et al. 2019). Moreover, most of the existing research focuses on organizations in developed economies. To enhance our theoretical insights and support the development of the service industry, there is need for more insights into the mechanisms of the innovation process (Arvanitis 2008). Our research aims to contribute to addressing these gaps by examining the influence of leadership and other drivers of innovative behavior in the context of a highly competitive service sector in an emerging economy.

Prior research suggests that appropriate leader characteristics may stimulate employee innovative behavior. For example, there has been research demonstrating that when leaders demonstrate transformational leadership behaviors, employees are more likely to engage in innovative behavior (e.g., Amankwaa, Gyensare, and Susomrith 2019; Afsar, Badir, and Bin Saeed 2014; Masood and Afsar 2017; Piccolo and Colquitt 2006; Reuvers et al. 2008; Sander and Shipton 2012). Transformational leadership is defined as leader behaviors that expand and raise follower perspectives by ensuring followers are aware of group or organizational vision, and by inspiring employees to higher self-interest with a view to achieving group or organizational interest (Bass 1985).

While previous studies linking transformational leadership to innovative behavior have been generally positive, some scholars have pointed out that this theoretical linkage may be oversimplified (Amankwaa et al. 2019; Aryee et al. 2012; Avolio, Walumbwa, and Weber 2009). Aryee et al. (2012) and Avolio et al. (2009) have suggested that more research is needed to explore mechanisms and boundary conditions that may enhance our understanding of employee innovative responses to transformational leadership. According to Aryee et al. (2012), such research can offer enhanced theoretical insights not only into how transformational leadership nurtures innovative behavior, but also into the specific conditions required for this to occur.

The current study responds to these calls to extend the research with the aim of examining the relationship between leadership and innovative behavior through a novel concept, job embeddedness, specifically via its two components of organizational embeddedness and community embeddedness. In so doing, it addresses the following research question: *How does transformational leadership influence employee innovative behavior?*

Job embeddedness refers to the non-affective reasons of why employees choose to stay on in their place and position of employment (Mitchell et al. 2001). Job embeddedness is made up of two components, namely organizational embeddedness, and community embeddedness. Organizational embeddedness reflects important elements (i.e., fit, links, and sacrifice) within one's organization that tie them to their current employer (Feldman, Ng, and Vogel). On the other hand, community embeddedness refers to important elements within the community that tie individuals to their current employer (Feldman et al. 2012).

Drawing on conservation of resources (COR) theory, we argue that organizational embeddedness would mediate the transformational leadership-innovative behavior relationship. Fundamentally, "COR is a motivational theory that explains much of human behavior based on the evolutionary need to acquire and conserve resources for survival, which is central to human behavioral genetics" (Hobfoll et al. 2018, 104). According to Hobfoll et al. (2018, 104), "individuals strive to obtain, retain, foster, and protect those things they centrally value". Thus, we assume that transformational leaders, through their characteristics (i.e., idealized influence, inspirational motivation, individualized consideration and intellectual stimulation), can offer employees psychological resources, such as energy and autonomy, which employees may reinvest in the work domain to enhance their comfort in the organization (fit), strengthen their relationships with others at work (links), and increase their psychological and material benefits of working in the organization (sacrifice). From the continuous resource

acquisition perspective of COR theory, employees may proactively embed themselves in the organization to protect themselves from resource losses and engage in innovative behaviors to attract more resources, such as promotion and pay rises. Following this logic, we contend that organizational embeddedness may serve as the conduit through which transformational leaders may nurture employee innovative behavior.

We also argue that community embeddedness would moderate the transformational leadership-innovative behavior relationship. Feldman et al. (2012) have observed that employees who are highly embedded in their community make conscious and strategic decisions to embed themselves in their work organization. For instance, employees who have family and friends in the community may proactively embed themselves in the organization as a form of resource insurance. Consistent with this position, Feldman and Ng (2007) assert that employees with low community embeddedness would be more likely to accept job opportunities in other locations, although they might be highly satisfied with their current jobs. Following this line of reasoning, we believe that the extent to which employees' organizational embeddedness may affect their innovative behavior would depend on how embedded they are in the community where they live.

Our research context is Ghana, an emerging economy, which has a growing, vibrant, and competitive service sector. In particular, we focus on the hotel industry which has seen the entry of upmarket international hotel brands, such as Kempinski (Amankwah-Amoah et al. 2018), and therefore raising the level of innovation needed among local players to preserve or grow their market share. By exploring the factors affecting innovative behavior development among employees in the Ghanaian context, and specifically among service workers, this paper makes at least four important contributions.

First, investigating the drivers of innovative behavior in the context of a highly competitive hotel industry in an emerging economy could inform managerial practice in the industry thereby contributing to better service quality and stimulating industry growth (Janssen 2005) through higher productivity (Shalley et al. 2004) and improving competitive advantages (Shih and Susanto 2016). Our study also contributes, in part, to address the data limitations and hence lack of existing studies in emerging economies by presenting a systematic empirical evidence on enabling conditions for the development of innovative behavior in organizations.

Second, the current study contributes to addressing the slow movement of innovation researchers from an R&D focus to that focusing on innovative behavior (Link 2019). In particular, this study redirects our attention from the extensive research focus on technical capital to the significance of human capital and reinforces the need for a better understanding

of the role of leadership in promoting innovative behavior. Thus, we provide a theoretical foundation to explain a specific enabling condition, namely job embeddedness, that may underlie the leadership-innovative behavior linkage. In this regard, we empirically test and theoretically extend Lee, Burch, and Mitchell's (2014) argument that having a leader who people trust may be embedding for employees.

Third, our study's measure of innovation at the employee level offers a unique perspective to the conceptualization of organizational innovation. Prior innovation scholars have sought to conceptualize innovation as R&D with extensive research focus on R&D investment (Lee 2020), R&D resources (Wu et al. 2019), R&D intensity (Meda 2020), internal R&D and acquisition of capital (Wang et al. 2020) and determinants and consequences of R&D activities (Urbano, Turro and Aparicio 2020). Consequently, our assessment of innovation at the employee level contributes to addressing the slow movement of innovation research from an R&D focus to employee innovative behavior (Link 2019). Besides, our measure broadly covers the traditional conceptualization of creativity in the innovation literature (Reuvers et al. 2008) where creativity is generally referred to as the formation of ideas and innovation is regarded as the implementation of these ideas. Thus, we recognize employee involvement in the organizational innovation process (Chen and Huang 2009).

Fourth, this study further develops the understanding of job embeddedness theory by exploring the role of organizational and community components of the job embeddedness construct in developing innovative behavior. Since Ng and Feldman's (2010) research that linked organizational embeddedness to employee innovation-related behaviors, only a few studies (Coetzer et al. 2018; Susomrith and Amankwaa 2019) have focused on this line of research. Coetzer et al. (2018), in particular, has called for further studies of job embeddedness and employee innovative behavior in sectors where innovative behavior forms part of employees' extra-role performance behavior which is largely the case in the service sector in emerging economies where innovative behavior is a discretionary role behavior. Our study therefore contributes to the job embeddedness and innovation research development agenda across a different sample and context (Coetzer et al. 2018; Lee et al. 2014).

The next section of this paper reviews relevant literature on innovative behavior, job embeddedness and transformational leadership resulting in a model for testing. This is followed by research methodology, analysis, results, and discussions. The paper ends with theoretical and practical implications, as well as limitations and avenues for future research.

2 Theory and literature review

2.1 Innovative behavior

Innovation is a key goal for many organizations because of its potential impact on organizational performance and productivity (Cozzarin 2017; Haned, Mothe, and Nguyen-Thi 2014; Shih and Susanto 2016; Webster 2004). It is especially relevant in today's business environment because of the intense competition among organizations. According to Jung (2001), innovation refers to employees' carefully orchestrated efforts to combine existing, conventional ideas to generate new approaches to solving problems. Amabile (1998) also views innovation as employees' approach to existing problems by developing solutions. Correspondingly, Chen and Huang (2009) posit that organizations' innovation initiatives heavily depend on employee human capital and behavior at work, as these are key inputs in the value creation process. Thus, an important aspect to enhance an organization's innovation is to develop the innovative behavior of its employees.

Janssen (2000) defines innovative behavior as the intentional creation, introduction, and application of new ideas within a work role, group or organization, with a view to benefiting role performance, the group or the organization. According to the author, innovative behavior includes an employee's deliberate attempts to generate ideas, promote the ideas and realize their implementation. Although Janssen's (2000) definition restricts innovative behavior to employees' intentional efforts to provide beneficial and novel outcomes, it broadly covers the traditional conceptualization of creativity in the innovation literature (Reuvers et al. 2008) where creativity is generally referred to as the formation of ideas and innovation is regarded as the implementation of these ideas. Drawing from the works of Janssen (2000) and Scott and Bruce (1994), innovative behavior is viewed as employees' deliberate engagement in the tasks of idea generation, idea promotion and idea realization. Although these three tasks are interrelated, employees may be expected to engage in a combination of them at any point in time (Scott and Bruce 1994) because innovation processes are often characterized by discontinuous activities (Reuvers et al. 2008). For this reason, the current study defined innovative behavior as a combination of two tasks: idea generation and idea implementation (realization).

Research has identified many drivers of innovative behavior, including leadership (Krabel and Schacht 2014; Pieterse et al. 2010), job autonomy (Bysted 2013), competition and rivalry (Athreye 2001). However, there are research gaps as researchers have been slow to move from an R&D (i.e., technical capital) focus on innovation to focusing on innovative

behavior (Link 2019). The next section reviews the literature around job embeddedness and its components as well as transformational leadership, which we argue are important in understanding the relationship between human capital dimensions of those who are involved in the innovation process and the resulting innovative behavior.

2.2 Job embeddedness

Since the early 2000s, the research of Mitchell and his collaborators on job embeddedness has redirected turnover research from affective reasons about why employees voluntarily leave their organizations to organizational and/or community factors that lead employees to remain in their jobs (Mitchell et al. 2001). Mitchell et al. (2001) define job embeddedness as a broad constellation of psychological, social, and financial influences on employee retention. These influences on the job are present in one's organization and in the community where one lives and are often compared to strands in a 'web' or 'net' in which a person can become 'stuck' (Mitchell et al. 2001). Thus, individuals with a greater number of strands become more enmeshed in this web to the extent that they develop greater difficulty leaving their job (Zhang, Fried, and Griffeth 2012). As advanced by Mitchell et al. (2001) and Lee et al. (2004), the job embeddedness construct focuses on the accumulated, generally non-affective reasons employees stay in their jobs, which constitute a sort of 'stuckness', inertia or bias towards the status quo.

Job embeddedness comprises two main components: organization embeddedness – based on whether the influences occur on the job; and community embeddedness – whether the influences occur off the job (Mitchell et al. 2001; Lee et al. 2004). Each dimension is further categorized into three important elements: fit, links, and sacrifice. *Fit* refers to employees' perceptions of how compatible or comfortable they are within the organization or community. This interpretation is based on how congruent employees perceive that their personal values, career goals and future aspirations are with the broader corporate culture and demands of the organization or with the living conditions and the cultural and recreational activities of the community (Mitchell et al. 2001). Generally, employees develop a good fit with their organization when their personal values, career aspirations, knowledge, skills, ability, and other capabilities are compatible with the organizational culture and with the requirements of the job (Zhang, Fried, and Griffeth 2012).

Links refer to desirable connections that employees establish with their work colleagues, supervisors, and others in their community. The number of links may tie employees in a social and psychological web, such that the greater the number of links between employees

and the web, the more a worker is bound to stay on the job (Mitchell et al. 2001; Lee et al. 2004). Depending on the population, employees may regard some links to be more desirable than others (Mitchell et al. 2001).

Sacrifice broadly relates to incentives that employees perceive they will lose should they leave their present organization or community (Mitchell et al. 2001; Lee et al. 2004). Practically, the sacrifice sub-component of the embeddedness construct reflects employees' perception of potential losses, which range from loss of desired connections formed in the organization or community, to loss of monetary incentives and loss of recognition or status. Leaving an organization can cause organization- and community-related losses, including giving up familiar colleagues, interesting projects, or desirable benefits (Zhang, Fried, and Griffeth 2012). Therefore, employees who are unwilling to give up such benefits are more likely to stay on the job. In sum, the job embeddedness theory reflects current and deeper understanding of employee connectedness to their organization and community and provides distinctive intuitions to understanding why people decide to stay with their organizations.

While job embeddedness has been used extensively to investigate employee turnover (e.g. Burton et al. 2010; Lee et al. 2004; Peltokorpi, Allen, and Froese 2015), there is a growing trend in research to examine whether it has effects on other important non-turnover aspects of employee outcomes and behaviors, for example innovative behavior (Coetzer et al. 2018; Ng and Feldman 2010; Susomrith and Amankwaa 2019). In addition, given the importance of leadership in explaining employee behaviors (Piccolo and Colquitt 2006; Reuvers et al. 2008; Sander and Shipton 2012), there is a dearth of research on leadership and job embeddedness in the current literature. Moreover, the majority of embeddedness studies have been conducted in developed economies, with a focus on large organizations, and this also limits our understanding and further development of job embeddedness theory (Holtom et al. 2008, Tanova and Holtom 2008). Therefore, there is need for further research to fill the gaps in the current body of knowledge.

2.3 Transformational leadership

The concept of transformational leadership was developed by Burns (1978) who considered it as a way for leaders to involve employees whereby leaders and employees can stimulate each other to greater levels of enthusiasm and standards. Transformational leadership affords both leaders and subordinates an opportunity to lift each other's work desires and optimism to higher levels. Bass (1985) advanced that transformational leaders inspire their subordinates to put into their work extra effort they originally would not have shown. Bass (1985) further contended

that employee motivation levels could be raised by ensuring they are aware of how importantly their work contributes to organizational expectations and outcomes. From this perspective, transformational leadership assumes that leaders affect followers by instilling in them a sense of trust so that followers appreciate and regard them positively. Transformational leaders focus on change and inspire subordinates to commit to shared visions and objectives for their work group or the organization. In the innovation process, transformational leaders challenge followers to be innovative problem solvers and support them through coaching, mentoring and support (Bass and Riggo 2006).

Bass and Avolio (2004) identify four behavioral characteristics which make transformational leaders influential and respected by their employees beyond the working relationships. *Idealized influence* is one trait which results in transformational leaders earning admiration, respect, and trust from followers. This trait causes followers to identify with their leaders and pursue organizational goals with them (Bass et al. 2003). *Inspirational motivation* is the trait which makes transformational leaders motivate followers by providing meaning to, and challenges in their work (Bass et al. 2003). It involves encouraging followers to strive for difficult goals, while showing confidence that they can achieve those goals. *Individualized consideration* makes transformational leaders carefully examine individual needs of followers (Bass and Avolio 2004) with a view to harnessing the optimal potential of the individual. For example, transformational leaders may recognize the needs of individuals and delegate assignments which provide learning opportunities to these individuals (Judge and Piccolo 2004). *Intellectual stimulation* makes transformational leaders fuel subordinates' understanding of problems, and identification of their own beliefs and standards. This trait allows transformational leaders to facilitate follower innovation and creativity by questioning assumptions, reframing problems and approaching old situations in new ways.

While transformational leadership has been found to influence innovative behavior, prior research may have oversimplified the theoretical linkage between the two concepts (Amankwaa et al. 2019; Aryee et al. 2012; Avolio et al. 2009). Moreover, the lack of empirical research that links transformational leadership to job embeddedness also presents another important research gap. By examining these gaps, the current study seeks to enhance our understanding of employee innovative responses to transformational leadership.

2.3 Transformational leadership and organizational embeddedness

There is still limited research on understanding the link between leadership and embeddedness. For example, Sekiguchi et al. (2008) found that organizational embeddedness moderates the

relationship between leader–member exchange (LMX) and task performance among telecommunication workers and the relationship between LMX and organizational citizenship behavior among manufacturing employees. Harris et al. (2011) also found that LMX positively relates to organizational embeddedness among automobile employees.

While the few studies above provide tentative evidence for a leadership – organizational embeddedness link, we concur with Lee et al. (2014) that leader characteristics that elicit trust and high regard from employees are likely to enhance employee embeddedness. Accordingly, we believe that there are several important reasons for examining transformational leadership as a precursor of organizational embeddedness.

First, transformational leaders tend to earn the trust and regard of their subordinates (Avolio et al. 2009), and the psychological energy and autonomy employees may derive from transformational leaders can be used to build more desirable relationships with the leader and other co-workers in the organization to strengthen employees' organizational links. Transformational leadership thus facilitates a congenial working environment that strengthens healthy interactions and networks among employees in the organization.

Second, transformational leaders can align employee values and the organization's ideology by creating and clarifying the organizational mission to reflect individuals' values and goals (Paarlberg and Lavigna 2010). In so doing, transformational leaders can strengthen employees' organizational fit, such that work is designed to maximize employee comfort on the job.

Third, employees of a transformational leader may consider the loss of physical and psychological benefits when leaving the organization (and the leader) too costly, and this can cause them to proactively embed themselves in the organization.

From the above arguments, we propose the following hypothesis:

H1. Transformational leadership is positively related to organizational embeddedness

2.4 Organizational embeddedness and innovative behavior

As noted earlier, based on the continuous resource acquisition and resource investment premise of COR theory, employees' motivation for resource acquisition and protection explains why they become embedded and how they behave once they are embedded (Kiazad et al. 2015). As employees accumulate and protect valuable resources, positive outcomes, such as innovative behavior will follow (Harris et al. 2011; Hobfoll et al. 2018). Employees may re-invest their surplus resources derived from their organizations or leaders in innovative behavior in order to receive more support from them. Such support and acknowledgement may come in the form

of promotion (resource acquisition), and this would stimulate employees' desire to engage more in innovative behavior. Embedded employees may re-invest the surplus resources in innovative behavior to acquire more resources and protect themselves from future resource losses.

Some early studies have found the job embeddedness construct promising in predicting innovative behavior. Based on Lee et al. (2004), Ng and Feldman (2010) theorized and empirically showed that employees' organizational embeddedness is fundamental to their innovative behavior. Recent empirical studies (Coetzer et al. 2018; Susomrith and Amankwaa 2019) have further shown the positive relationship between organizational embeddedness and innovative behavior. According to Coetzer et al. (2018), more empirical studies are needed specifically in contexts where innovative behaviors are not part of employees' in-role performance outcomes to extend our understanding of this relationship. This is because innovative behavior is generally a discretionary role behavior (Carmeli, Meitar, and Weisberg 2006) and forms part of employees' extra-role performance behavior (Coetzer et al. 2018; de Jong and den Hartog 2010).

From this reasoning, the following hypothesis is proposed:

H2. Organizational embeddedness is positively related to innovative behavior.

The theoretical and empirical discussions thus far suggest that while transformational leadership is expected to promote organizational embeddedness, organizational embeddedness is expected to consequently promote innovative behavior. In other words, transformational leadership and organizational embeddedness can work together to influence innovative behavior. For example, by acting as mentors and providing professional development support to employees, transformational leaders and employees may develop a bond, which might make employees proactively embed in the organization and create normative pressure for them to repay the organization by engaging in innovative behavior. In line with this, we propose the following hypotheses:

H3. Organizational embeddedness mediates the relationship between transformational leadership and innovative behavior.

2.4.1 Moderator of the embeddedness – innovative behavior relationship

Community embeddedness

Although Ng and Feldman (2010) considered only the organizational component of the job embeddedness construct in explaining innovative behavior, researchers (e.g., Lee et al. 2004;

Ng and Feldman 2014; Susomrith and Amankwaa 2019) agree that community embeddedness is useful in predicting employee performance outcomes. As Lee et al. (2014) note, "almost all the studies on JE [job embeddedness] attend to the on-the-job component, whereas only a few investigate the off-the job component" (212). For instance, Wheeler, Harris, and Sablynski (2012) have empirically demonstrated the predictive influence of community embeddedness on job performance. However, Feldman et al. (2012) point out that community embeddedness works in combination with organizational embeddedness to predict employee work behaviors and attitudes. For example, employees who are highly embedded in the community where they live (e.g. their children go to good schools in the community) might make conscious and strategic decisions to embed themselves in their work organization. From this theoretical perspective, Feldman and his colleagues suggest that community embeddedness may be treated as a potential moderator of the relationships between organizational embeddedness and employee work behaviors and attitudes. Consequently, we propose the following hypothesis:

H4. Community embeddedness will moderate the relationship between organizational embeddedness and innovative behavior.

Research model

Figure 1 presents our proposed research model with the hypotheses.

-- Insert Figure 1 about here --

3 Research Methods

3.1 Study context

Ghana has experienced a vibrant and competitive hotel industry (Amankwah-Amoah et al. 2018). Since innovative behavior helps organizations, especially in highly competitive service sectors, to stay competitive (Shih and Susanto 2016) and adapt quickly to industry changes (Jong and Ruyter 2004), understanding drivers of innovative behavior in this industry and in the context of an emerging economy such as Ghana is important for improved service quality and growth of hotels.

The hotel industry was selected for two important reasons. First, the entry of upmarket international hotel brands in the Ghanaian hotel industry has raised the level of innovation needed among local players to preserve or grow their market share. Therefore, exploring the factors affecting innovative behavior development among employees in this context could inform managerial practice in the industry thereby contributing to better service quality and

broader industry growth. Second, research in embeddedness and innovative behavior is encouraged in sectors where innovative behavior forms part of employees' extra-role performance behavior (Coetzer et al. 2018). Unlike other sectors, such as engineering and information technology, innovative behavior is generally discretionary for hotel employees.

3.2 Participants and procedure

We contacted 43 hotel representatives who attended a Ghana Hotels Association meeting held at the Fiesta Royale Hotel in Accra, the capital city of Ghana, to enquire about their willingness to participate in this study. The representatives provided us with contact details of their HR executives, who we contacted for permission to conduct this study in their hotels. Overall, 12 hotels allowed their employees to participate in this research. Potential participants were informed that participation was voluntary, and that the information provided in the survey was confidential. Participants were provided reply-paid envelopes in which to seal completed questionnaires before returning them directly to the lead researcher on site. A total of 357 completed questionnaires were returned, of which 312 were usable in our analysis. Consistent with prior embeddedness and innovative behavior research (Coetzer et al. 2018; Susomrith and Amankwaa 2019), the participants rated their own level of embeddedness and innovative behaviors.

3.2.1 Demographic profile of participants

Of the 312 respondents, 153 were females and 159 were males. The respondents worked for hotels ranging from 1-Star (7.7%), 2-Star (3.5%), 3-Star (23.7%), 4-Star (39.8%) to 5-Star (25.3%) hotels. They were drawn from eight core departments, including food and beverage (22%), housekeeping (20%), front office (18%), and human resource (9%). The educational levels of respondents were as follows: 27% had obtained a bachelor's degree, with the lowest level of qualification being a senior high-school certificate (27%).

3.3 Measures

3.3.1 Innovative behavior

Innovative behavior was measured based on the research of Scott and Bruce (1994) and Janssen (2005). As noted, innovative behavior was conceptualized in the present study as two behavioral phases that hotel employees undergo, namely idea generation and idea implementation (realization). Idea generation was measured by three items: 'My ideas generate original solutions to problems'; 'I often search out new working methods, techniques, or

instruments'; 'I create new ideas for improvements'. Idea realization was expressed in a single item: 'I work actively to implement or test new ideas'.

3.3.2 Transformational leadership

Transformational leadership was measured by 20 items from Bass and Avolio's (2004) Multifactor Leadership Questionnaire. We categorized the items under the following four core behavioral components of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Responses were rated on a five-point scale ranging from 1 (not at all) to 5 (frequently, if not always).

3.3.3 Organizational and community embeddedness

Organizational and community embeddedness were both measured using 18 items from Felps et al.'s (2009) job embeddedness scale. The items comprised the subdimensions of fit, links and sacrifice. Each subdimension was measured using three items. Sample items of the organizational component were: 'my hotel utilizes my skills and talent well' (fit); 'I work closely with my co-workers' (links); 'I would sacrifice a lot if I leave this hotel' (sacrifice). Sample items of the community component were: 'I really love the place where I live' (fit); 'my family roots are in this community' (links); 'leaving the community where I live would be very hard' (sacrifice). Responses were rated on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3.4 Control variables

Following prior research (e.g., Aryee et al. 2012; Coetzer et al. 2018; Pieterse et al. 2010), we controlled for age, educational level, and marital status (1 = married, 2 = single, 3 = separated).

3.4 Controlling for potential common method bias

Given that cross-sectional designs have the potential for common method bias (Podsakoff et al. 2003), we followed recommendations by Spector (2019), and Podsakoff, MacKenzie Podsakoff (2012) to ensure this bias was not present in the current study. First, we employed methodological separation at the questionnaire design stage by using different response modes and physically separating the predictor and criterion variables (Podsakoff et al. 2012). Second, we included control variables in our analysis based on the literature to rule out potential spurious relationships (Spector 2019). Third, after data collection, we followed Podsakoff et al. (2012)'s statistical approach to assess potential common method variance because Harman's single factor test does not seem sufficiently robust to test this variance.

We estimated two confirmatory models in AMOS (version 25): one model with a common latent factor, the other without a common latent factor. The output was exported into an Excel file where the standardized estimates of the two models were compared. A threshold of 0.20 was set as common method variance (Podsakoff et al. 2003). To identify whether any item suffered from common method variance, we deducted the results of the model without the common latent factor from the model with the latent factor. Using the conditional format option in Excel, analysis of the difference revealed that all the variances were below zero indicating that common method variance was not an issue in our study.

4 Data analysis

Data was initially entered in SPSS (version 25) for descriptive analysis. A four-factor measurement model, including transformational leadership, organizational embeddedness, community embeddedness and innovative behavior ("Appendix" *Fig. 3*) was then estimated in AMOS to assess the validity (i.e. convergent and discriminant validity) of the constructs and the fit of the proposed model. Convergent validity was assessed using three indicators: composite reliability (CR), average variance extracted (AVE) and factor loadings. Discriminant validity was assessed using Fornell and Lacker's (1981) criterion, where the square root of each latent construct's AVE should be greater than the correlations with other latent constructs. To test our moderated-mediation model, we used Hayes' (2013) PROCESS macro (in SPSS v.25) using 5,000 bootstrap samples at 95% confidence level. For purposes of clarity, all the variables used in the empirical analysis are summarized in Table 1.

-- Insert Table 1 about here --

4 Results

Table 2 reports scale reliabilities, means, standard deviations and correlations among the study variables. Significant and positive correlations were found between transformational leadership and innovative behavior ($r = 0.20$, $p < 0.01$), organizational embeddedness and innovative behavior ($r = 0.36$, $p < 0.01$), and community embeddedness and innovative behavior ($r = 0.28$, $p < 0.01$). For the demographic data, only age ($r = 0.17$, $p < 0.01$), educational level ($r = 0.22$, $p < 0.01$) and marital status ($r = 0.15$, $p < 0.01$) correlated significantly with innovative behavior.

-- Insert Table 2 about here --

4.1 Measurement model assessment

Assessment of the model revealed a good fit of the four-factor model to the data: chi-square ($\chi 2$) = 1,318.58; degrees of freedom (*df*) = 757; normed χ^2 ($\chi 2/df$) = 1.74; comparative fit index (CFI) = 0.91; Tucker–Lewis index (TLI) = 0.90; root mean square residual (RMR) = 0.07; and root mean square error of approximation (RMSEA) = 0.05. The model also showed evidence of convergent validity with high CRs, factor loadings and AVEs. The CR of each of the latent constructs in the model was above the 0.70 threshold (Hair et al. 2014), an indication that the measures used in the current study are all reliable (Bagozzi and Yi 1988). All the factors loaded to or above 0.70, and the AVE of each latent construct was greater than the 0.50 threshold (Hair et al. 2014). Table 3 presents results of the measurements and indicators, including factor loadings, AVEs and CRs.

-- Insert Table 3 about here --

Further assessment of the measurement model provided evidence of discriminant validity. As shown in Table 4, the square root of each latent construct's AVE was greater than the correlations with the other factors, indicating discriminant validity (Fornell and Larcker, 1981).

-- Insert Table 4 about here –

4.2 Hypotheses testing

4.2.1 Direct effects

The results of the hypotheses test are summarized in Table 5. Hypothesis 1 [H1] predicted that transformational leadership would positively relate to organizational embeddedness. As shown in Table 5 ($\beta = 0.315$, $p < 0.001$), H1 was supported. Hypothesis 2 [H2] predicted that organizational embeddedness would be positively related to innovative behavior. The results in Table 5 show a strong, significant and positive relationship ($\beta = 0.582$, $p < 0.001$), thus giving support to H2 as no significant relationship was found between transformational leadership and innovative behavior ($\beta = 0.003$, $p > 0.05$), and community embeddedness and innovative behavior ($\beta = 0.422$, $p > 0.05$).

-- Insert Table 5 about here --

4.2.2 Conditional indirect effects (i.e., moderated mediation)

Conditional indirect effects occur when the strength of a mediation effect depends on the level of a boundary construct (Preacher, Rucker, and Hayes 2007). Conditional indirect effect analysis thus observes evidence of mediation at specific points of the boundary variable (i.e. the moderator). Hypothesis 3 [H3] predicted that organizational embeddedness would mediate the relationship between transformational leadership and innovative behavior. We estimated what Hayes (2013) refers to as 'model 14' in the moderated-mediation literature, which allows for up to ten parallel meditators and one moderator on the mediator–dependent variable relationship. To prove that a construct mediates a relationship, the effect size (at 95% CI) must not include zero. The results in Table 6 show that organizational embeddedness mediates the transformational leadership- innovative behavior relationship at three levels of community embeddedness: low community embeddedness ($\beta = 0.133$; SE = 0.034, CI = 95%), average community embeddedness ($\beta = 0.116$; SE 0.028, CI = 95%), and high community embeddedness ($\beta = 0.097$; SE = 0.036, CI = 95%), thus supporting H3. A full mediation was thus achieved as no significant relationship was found between transformational leadership and innovative behavior.

-- Insert Table 6 about here --

4.2.3 Moderation analysis

Hypothesis 4 [H4] predicted that community embeddedness will moderate the relationship between organizational embeddedness and innovative behavior. As shown in Table 6, H4 was not supported because community embeddedness did not moderate the relationship between organizational embeddedness and innovative behavior ($\beta = -0.069$, $\Delta R^2 = 0.003$, $p > 0.05$). Figure 2 presents the moderation plot.

-- Insert Figure 2 about here --

5 Discussion

While the theoretical link between transformational leadership and innovative behavior seems established in existing research, our study finds that this relationship may be oversimplified and that there may be important factors like organizational embeddedness that can enhance understanding of how employee innovative behavior can be developed.

5.1 Theoretical implications

Our study's findings provide several theoretical contributions to the existing body of knowledge.

First, our findings suggest that organizational embeddedness fully mediates the relationship between transformational leadership and innovative behavior. Although previous research that did not test for mediators found a direct and positive influence of transformational leadership on innovative behavior (Afsar et al. 2014; Choi et al. 2016; Gumusluoglu and Ilsev 2009; Kang, Solomon, and Choi 2015; Si and Wei 2012), our results found no such evidence. Rather, our results indicate that transformational leadership promotes innovative behavior indirectly through organizational embeddedness. This could possibly be due to the implicit expectation from members of Ghanaian society to establish harmonious relationship with one another by acting with modesty and respect at all times. Thus, unless leader behaviors normatively encourage employees to embed in the organization, attempts by organizations to elicit innovative responses from employees might prove futile. As arguably our study is one of the few to explore the existence of mediators, this finding offers novel theoretical insights to the existing research that focuses on the mechanisms and conditions through which transformational leadership is related to innovative behavior, which may be more complex than previously theorized (Amankwaa et al. 2019; Aryee et al. 2012; Choi et al. 2016; Gumusluoglu and Ilsev 2009; Sarros, Cooper, and Santora 2008).

Second, our study's results show that transformational leadership enhances employee organizational embeddedness. As discussed in the literature review, the few leadership and job embeddedness research have focused mainly on LMX (Harris et al. 2011; Sekiguchi et al. 2008). To the best of our knowledge, no study has explored transformational leadership as a precursor of organizational embeddedness. Thus, our empirical evidence lends support to COR theory, and enhances the theoretical perspective that the surplus resources employees derive from transformational leaders can be reinvested into the work domain to strengthen employees' organizational embeddedness. As such, the study also contributes to leadership and job embeddedness literature, and adds to existing research on precursors of organizational embeddedness (Bambacas and Kulik 2013; Charlier, Guay, and Zimmerman 2016; Chen and Ayoun 2019; Harris et al. 2011; Karatepe 2016; Ng and Feldman 2011; Nguyen, Taylor, and Bergiel 2017; Tian, Cordery, and Gamble 2016).

Third, we find evidence of a strong and positive relationship between organizational embeddedness and innovative behavior in the Ghanaian hotel sector. While this result is largely

consistent with existing research (Coetzer et al. 2018; Ng and Feldman 2010; Susomrith and Amankwaa 2019), the effect sizes were much larger in our study. In earlier studies, the effect size of organizational embeddedness on innovative behavior after controlling for demographic and other attitudinal variables was 22% (Ng and Feldman 2010), 24.7% (Coetzer et al. 2018) and 21% (Susomrith and Amankwaa 2019). In our study, the effect size is 58.2%, more than double of the previous studies. Therefore, when compared to previous research, our results suggest that the relationship between organizational embeddedness and innovative behavior is potentially a very fruitful avenue for further research especially for understanding the development of innovative behavior in emerging economy contexts.

As for the moderated-mediation results presented in Table 6, they indicate that even at low, average, and high levels of community embeddedness (i.e., the moderator), organizational embeddedness fully mediates the relationship between transformational leadership and innovative behavior. Interestingly, the direction of the conditional mediation effects suggests that as individuals' embeddedness in the community increases, the mediation effect of their organizational embeddedness decreases. This observation supports and extends our arguments under COR theory in that the surplus resources employees derive from transformational leaders may not only be reinvested in the work domain, but also in the community where they live. This reason may explain why at high levels of employee community embeddedness, the mediation effect of organizational embeddedness on the transformational leadership-innovative behavior relationship is quite low.

Last, our findings indicate that community embeddedness does not moderate the organizational embeddedness-innovative behavior relationship. This result partly contradicts the theoretical position of Feldman et al. (2012) that community embeddedness and organizational embeddedness work interactively to drive employee work outcomes. This result may be explained by the fact that individuals who are highly embedded in the community may deliberately embed in the organization for the purposes of sustaining continuous employment to cater for self and family, but not necessarily for promoting outcomes that benefit the organization. We also found no significant effect of community embeddedness on innovative behavior, a result which is consistent with Coetzer et al. (2018), but partly contradicts the work of Susomrith and Amankwaa (2019) who found a positive relationship between community embeddedness and innovative behavior. These mixed results regarding community embeddedness underscore Lee et al.'s (2014) call for more research focusing on community embeddedness. Like ours, Coetzer et al.'s (2018) work was conducted in Africa and together

suggest that cultural context may be a fundamental issue for scholars to consider when exploring the community component of job embeddedness.

5.2 Practical implications

This study provides empirical evidence that may help leaders to encourage innovative behavior through job embeddedness. In this regard, our study makes at least two practical contributions as follows.

First, leaders and managers should understand that their behaviors are important factors in facilitating employee innovative behavior which can then enhance organizational innovation (Ramamoorthy et al. 2005; Shalley et al. 2004). This issue is particularly relevant in the hotel business space where employee innovative efforts generally form a part of their extra-role performance behavior (Amankwaa et al. 2019; Coetzer et al. 2018). Our findings accentuate the need for organizations to effectively support managers and immediate supervisors to develop transformational leadership behaviors to strengthen employee organizational embeddedness and consequently stimulate innovative behavior, a prerequisite for organizational innovation.

Second, the leadership-embeddedness relationship offers useful information for reducing employee turnover, particularly important in terms of enhancing innovation (Wang and Zatzick 2019). Leaders in organizations need to understand that employee perceptions are important in that they need to learn to demonstrate idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation towards subordinates because these characteristics are essential for facilitating employee organizational embeddedness.

5.3 Limitations and future research directions

Our study is not without limitations, and future research can address them as follows.

First, the responses to our survey were all provided by individual respondents in a single survey, raising concerns of common method bias (Podsakoff et al. 2003) and hence an inability to draw causal inferences (Spector 2019). Although the common latent factor analysis revealed that common method variance was not a pervasive issue in the present study, we encourage future studies to consider techniques to control for common method variance and enhance causal inferences. Such techniques may include employing control variables to rule out spurious relationships (Spector 2019), and if feasible, introducing time lags between the measurement of independent and dependent variables (Podsakoff et al. 2012).

Second, despite its strengths, our measure of innovative behavior may have some weaknesses. Based on the works of Janssen (2000) and Scott and Bruce (1994), we defined innovative behavior as employees' intentional efforts (i.e., engagement in three tasks: idea generation, idea promotion and idea realization) to provide beneficial and novel outcomes to the role performance, group or organization. However, the current study measured innovative behavior as employees' deliberate engagement in two tasks: idea generation and idea implementation (realization). Nonetheless, our approach is consistent with innovative behavior research as innovation processes are often characterized by discontinuous activities (Reuvers et al. 2008).

Third, while our results provide a potentially fruitful direction for future research, the generalizability of our findings should be put into context. It is worth noting that we collected data from employees working for 1-Star to 5-Star hotels in Accra, the capital city and central business hub of Ghana. Thus, it is plausible that our sample may not be entirely representative of the broader hotel industry in Ghana. In addition, while our study provides tentative evidence of a positive relationship between transformational leadership and organizational embeddedness, for purposes of generalizability, future studies should consider testing this relationship across different samples and contexts. Studies that investigate which specific dimensions of transformational leadership contribute to organizational embeddedness would further enhance our understanding of leadership in embeddedness research.

Fourth and finally, although our results indicate evidence of the full mediation effect of organizational embeddedness on the transformational leadership- innovative behavior relationship, as well as conditional mediation effects at low, average and high levels of community embeddedness, we found no evidence of community embeddedness moderating the relationship between organizational embeddedness and innovative behavior. Further research should consider replicating the study in different contexts and with different samples as this might provide conclusive assertions about the effect of community embeddedness on the organizational embeddedness-innovative behavior linkage. Future studies may also consider other theoretically sound moderating variables when exploring the organizational embeddedness- innovative behavior relationship.

6 Conclusion

This study developed and tested a model of innovative behavior exploring transformational leadership and job embeddedness as nurturing conditions finding organizational embeddedness as an underlying mechanism, perhaps the 'missing link' in the relationship between

transformational leadership and innovative behavior. When leaders in highly competitive service sector organizations in emerging economies display the appropriate behaviors, employees are then encouraged to proactively embed themselves in the organization, which will facilitate the development of innovative behavior. Additionally, this paper is one of the first to demonstrate empirically that transformational leadership is essential for organizational embeddedness. Moreover, the embeddedness- innovative behavior relationship is a potentially fruitful line for future research (Coetzer et al. 2018; Ng and Feldman 2010; Susomrith and Amankwaa 2019), not only because of its value in developing job embeddedness research, but also for its potential to enriching our understanding of the antecedents of employee innovative behavior (de Jong and den Hartog 2010).

Declarations

Funding

None

Availability of data and material

The research data that support the analyses and results of this study are available upon reasonable request from the corresponding author, [AA].

Compliance with ethical standards

Conflicts of Interest

We have no conflicts of interest to disclose.

Appendix

See Figure 3.

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Tables

Table 1. Definition of key study variables

Innovative behaviour	Employee's intentional creation, introduction, and application of new ideas within a work role, group or organization, with a view to benefiting role performance, the group or the organization (Janssen 2000; Scott and Bruce 1994).
Transformational leadership	Leader behaviors that transform followers to rise above their self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected (Bass 1985).
Job embeddedness	Important elements within an individual's work and non-work environments (non-affective reasons) which make them choose to stay on the job or with the current employer (Mitchell et al. 2001).
Organizational embeddedness	Important elements within one's work organization (on-the-job factors) that tie them to their job or current employer (Feldman et al. 2012; Mitchell et al. 2001).
Community embeddedness	Important elements within one's community (off-the-job factors) that tie them to their job or current employer (Feldman et al. 2012; Mitchell et al. 2001).

Table 2. Descriptive statistics and correlations

Variables	**Mean**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1. Transformational leadership	3.46	.83	(.94)								
2. Organizational embeddedness	3.84	.59	.47**	(.827)							
3. Community embeddedness	3.15	.83	.23**	.20**	(.85)						
4. Innovative behavior	3.73	.70	.20**	.36**	.28**	(.84)					
5. Age	31.69	8.85	.05	.10	.16**	.17**					
6. Gender	.51	.501	.02	.01	.08	.11	.26**				
7. Educational level	2.91	1.57	.09	.17**	.13**	.22**	.25**	-.10			
8. Tenure	2.43	1.35	.01	.03	.11	.10	.74**	.19**	.19**		
9. Marital status	1.38	.51	-.04	-.09	.11	.15**	.55**	.15**	.19**	.48**	
10. Hotel size (rating)	3.69	1.17	-.04	.09	.16**	.09	.05	-.01	.14*	-.01	.04

Note. $N = 312$. Cronbach's alpha coefficient for the variables are shown in bracket along the diagonal.
** Correlation is significant at the 0.01 level (two-tailed); * correlation is significant at the 0.05 level (two-tailed).

Table 3. Measurement and indicators

Construct	*Standardized loadings*	*Average variance extracted*	*Composite reliability*
Transformational leadership		0.78	.934
Idealized influence	.85		
Inspirational motivation	.89		
Intellectual stimulation	.96		
Individualized consideration	.83		
Organizational embeddedness		.72	.89
Fit	.88		
Links	.78		
Sacrifice	.89		
Community embeddedness		.68	.86
Fit	.73		
Links	.87		
Sacrifice	.85		
Innovative behavior		.56	.84
Indicator 1	.78		
Indicator 2	.70		
Indicator 3	.79		
Indicator 4	.73		

Note: N = 312

Table 4. Discriminant validity statistics (Fornell-Lacker criterion)

Construct	**AVE**	**MSV**	**1**	**2**	**3**	**4**
1. Transformational leadership	0.78	0.32	**0.88**			
2. Innovative behavior	0.56	0.19	0.25	**0.75**		
3. Organizational embeddedness	0.72	0.32	0.56	0.43	**0.85**	
4. Community embeddedness	0.68	0.12	0.28	0.35	0.24	**0.82**

Note. AVE denotes average variance extracted, MSV, maximum shared variance. Values in bold along the diagonal represent the square root of AVEs of the constructs.

Table 5. Path analytic results of the hypothesized model

	Stage 1			**Stage 2**		
	Outcome Variable: Organizational Embeddedness			**Outcome Variable:** Innovative Behavior		
Variables	**β**	**se**	**95% CI**	**β**	**se**	**95% CI**
Control variables						
Age	.001**	.004	[.002, .017]	.002	.005	[-.008, .012]
Educational level	.047**	.020	[.009, .084]	.049*	.024	[.002, .096]
Marital status	-.192***	.069	[-.327, -.058]	.165	.087	[-.007, .336]
Theoretical paths						
Transformational leadership → organizational embeddedness	.315***	.035	[.246, .385]			
Transformational leadership → innovative behavior				.003	.050	[-.095, .101]
Organizational embeddedness → innovative behavior				.582***	.219	[.152, 1.013]
Community embeddedness → innovative behavior				.422	.265	[-.098, .943]
Interaction term						
Organizational embeddedness x community embeddedness				-.069	.068	[-.203, .065]
Δ R^2 (innovative behavior)				.003		
F				1.028		

Note: N = 312.

Table 6. Conditional mediation effects of organizational embeddedness at levels of community embeddedness

Dependent variable	Level of community embeddedness	Effect	Boot SE	95% CI
Transformational leadership	Low community embeddedness	.133	.034	[.073, .207]
	Average community embeddedness	.116	.028	[.065, .177]
	High community embeddedness	.097	.036	[.028, .172]

Note: N = 312. Indirect effect exists when the lover and upper limit interval do not contain zero at 95% confidence level.

Figures

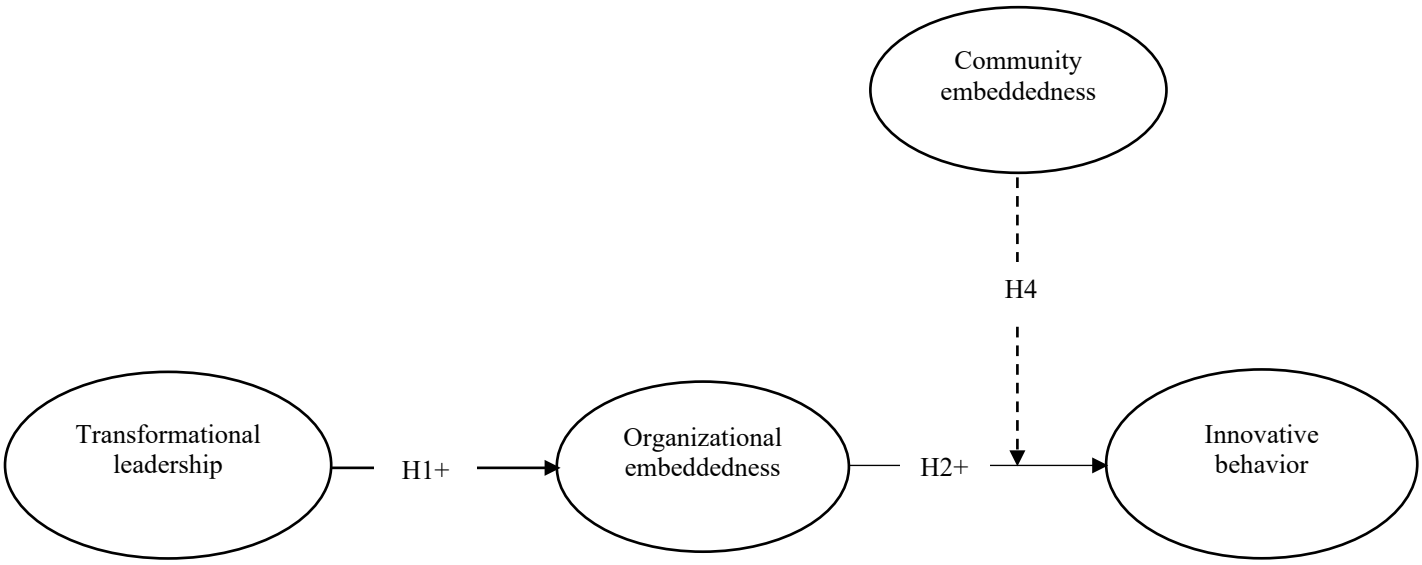

Figure 1. **Research model**

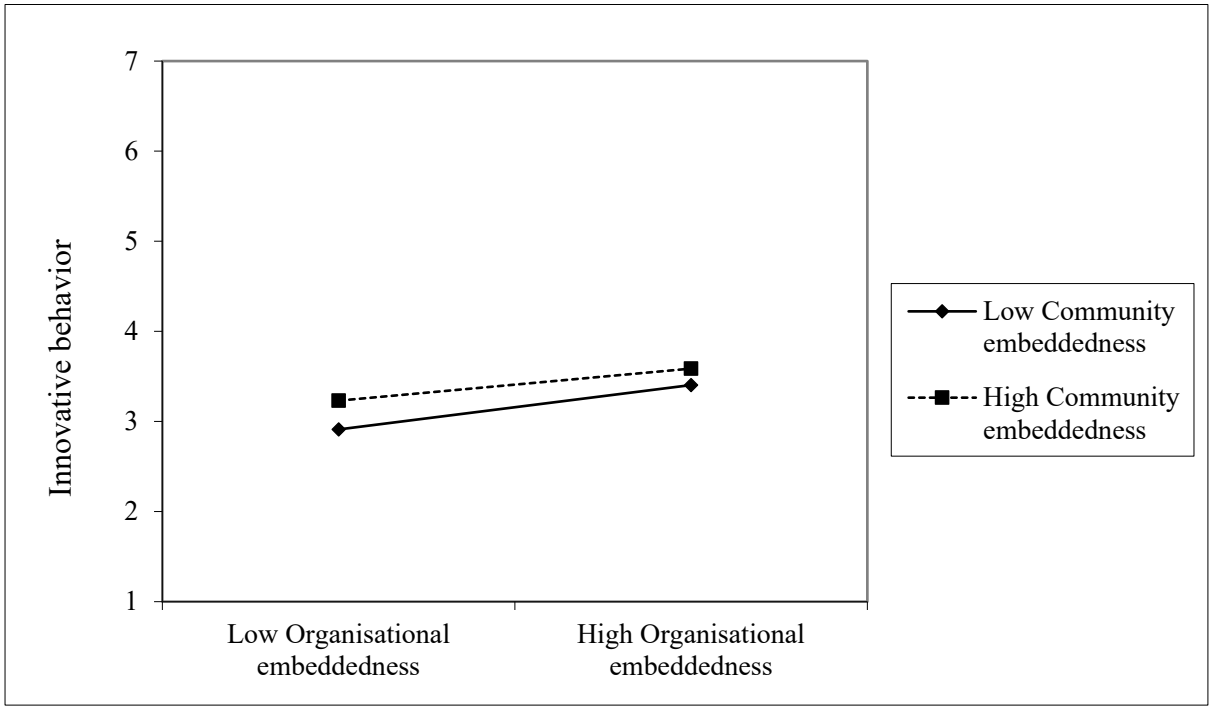

Figure 2. Moderation effect of community embeddedness on organizational embeddedness and innovative behavior

Appendix

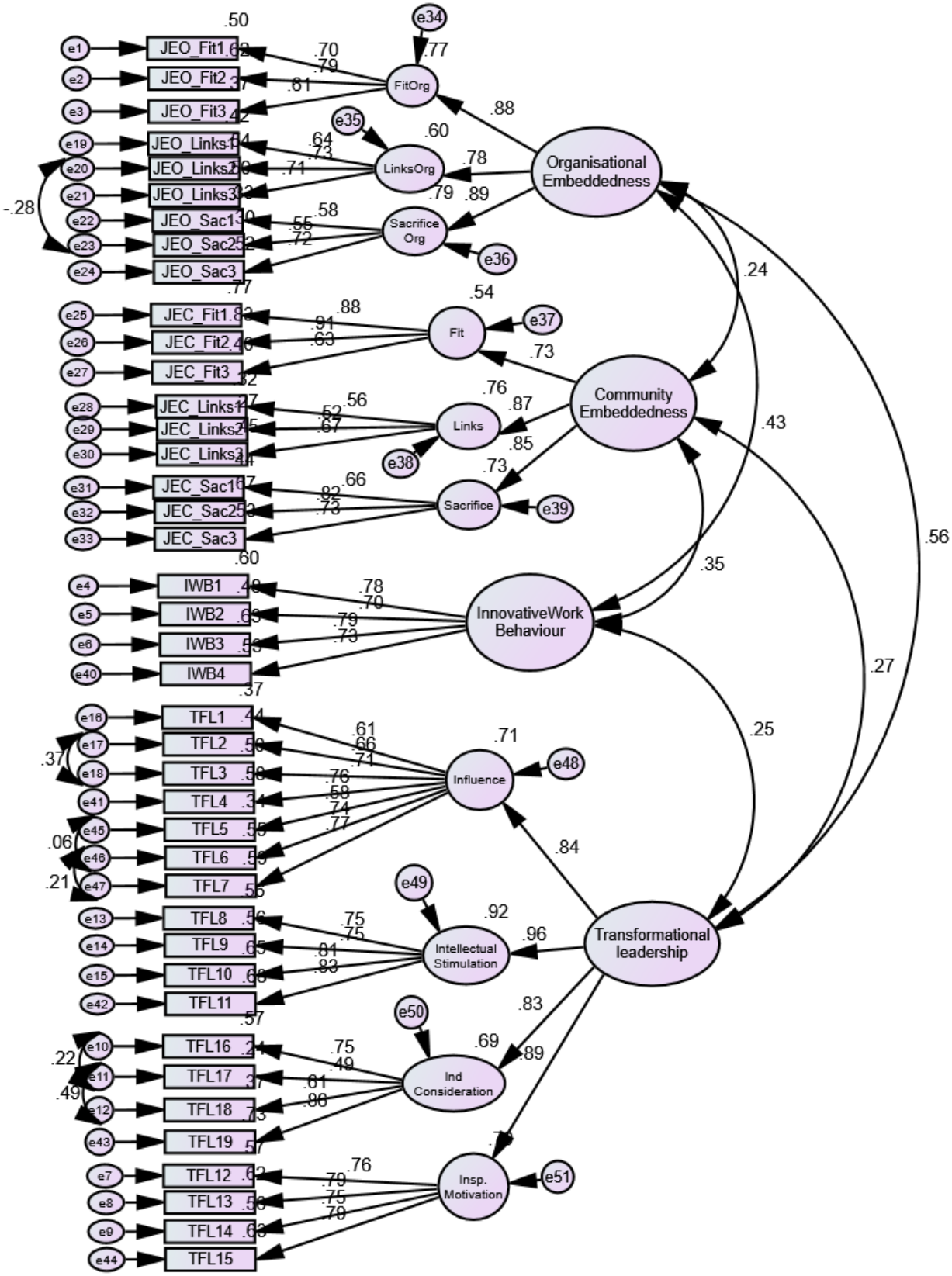

Figure 3. Measurement model