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Extending the job embeddedness-life satisfaction relationship: An exploratory investigation

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Abstract

Purpose:
This exploratory study adopts a stakeholder perspective on organisational effectiveness. It examines the job embeddedness-life satisfaction relationship, the moderating roles of gender and community embeddedness, and the mediating role of innovative work behaviour.

Design/methodology/approach:
Using a snowballing approach, data were collected from 549 participants employed in organisations located in four major metropolitan centres in South Africa.

Findings:
Analyses revealed a positive relationship between job embeddedness and life satisfaction. Gender moderated the job embeddedness-life satisfaction relationship, such that the relationship was stronger among females than males. Community embeddedness moderated the organisation embeddedness-life satisfaction relationship, such that the relationship was stronger when participants were highly embedded in their community. Finally, innovative work behaviour mediated the relationship between organisation embeddedness and life satisfaction.

Research limitations/implications:
The cross-sectional nature of this study rules out causal conclusions. The links reported in this study should be confirmed through research using strong designs. The affective aspect of subjective wellbeing should be included in future studies.
**Practical implications:**

Managers could enhance employees’ life satisfaction through practices that increase on-the-job and off-the-job embeddedness. Furthermore, organisations could encourage employees’ innovative behaviours through workplace supervisors’ supportive responses to innovative employees.

**Originality/value:**

Job embeddedness researchers have yet to focus on the personal benefits of embeddedness for employees. Results of our study provide several contributions to this research direction. The study uses job embeddedness as a composite construct to confirm its relationship with life satisfaction. It also expands the job embeddedness-life satisfaction relationship by examining moderators of the relationship and a mediating variable in the relationship.

**Key words:** Job embeddedness, Life satisfaction, Gender, Innovative work behaviour

**Introduction**

Job embeddedness (JE) is the extent to which an employee is enmeshed in his or her job and it results from numerous contextual forces (labelled links, fit, and sacrifice) in the organisation and community that operate on a focal employee (Lee, Burch and Mitchell, 2014). Although JE theory was developed to explain voluntary employee turnover (Mitchell, Holtom, Lee Sablynski and Erez, 2001), subsequent studies have shown that JE is also related to non-turnover outcomes, such as organisational citizenship behaviours, volitional absences and core task performance (Burton et al., 2010; Lee, Mitchell, Sablynski, Burton and Holtom, 2004). Most JE studies have examined the effects of JE on organisational outcomes (Lee at al., 2014), while insufficient attention has been paid to the effects of JE on the well-being of employees. This study addresses this gap by
adopting a stakeholder perspective on organisational effectiveness (Carroll, 1991; Hubbard, 2009) and by focusing on how JE is related to employees’ life satisfaction. It is important to address this relationship because the experiences that individuals draw from both work and nonwork domains can have significant effects on their well-being (Greenhaus and Kossek, 2014; Hirschi, Herrmann, Nagy and Spurk, 2016). Furthermore, organisations are likely to benefit from satisfied employees, since satisfied employees have lower turnover and improved job performance (Erdogan, Bauer, Truxillo and Mansfield, 2012).

A recent study found positive relationships between JE and life satisfaction (Ampofo, Coetzer and Poisat, 2017). This study examined relationships between organisation embeddedness and life satisfaction, community embeddedness and life satisfaction, and the relationships between the individual dimensions of fit, links and sacrifice, and life satisfaction. However, given that this was one of the first studies to explore the JE-life satisfaction relationship, our knowledge about this topic is obviously incomplete. For research on the relationship between JE and life satisfaction to develop systematically, additional exploratory research on moderators and mediators of the JE-life satisfaction relationship is needed to deepen our understanding of the relationship and to improve our ability to positively influence the relationship in practical ways.

While Ampofo et al. (2017) examined the relationships between the various sub-dimensions of JE and life satisfaction, the present study treats JE as a composite construct to examine its link with life satisfaction. Another unique aspect of the present study is the expansion of the JE-life satisfaction relationship. We considered gender and community embeddedness as potential moderators in JE-life satisfaction relationship. In regard to gender as a potential moderator, women are typically associated with higher family centrality and lower work centrality when compared with men (Greenhaus and Kossek, 2014). These purported gender differences in
foci on these two life domains invites the question: How might gender affect the JE-life satisfaction relationship? Regarding community embeddedness as a potential moderator, it is likely that employees will experience differing levels of embeddedness in the communities where they live. This awareness encouraged us to explore how the satisfaction levels that employees obtain from their nonwork experiences (e.g., relationships with friends and family in the community) might influence their work experiences and their life satisfaction. This is a worthwhile line of inquiry, because there are practices that organisations can adopt to enhance the community embeddedness of employees (Dawley and Andrews, 2012; Tanova and Holtom, 2008; Crossley, Bennett, Jex and Burnfield, 2007). Finally, given that our study participants were professionals and would be expected to find, suggest and implement new and beneficial work-related ideas (Dorenbosch, van Engen and Verhagen, 2005), we examined the mediating role of innovative work behaviour (IWB) in the JE-life satisfaction relationship. This anticipated relations among variables is based on the proposition that resources available to individuals at work and in their communities enhances their propensity to engage in innovative behaviours, which subsequently increases their life satisfaction (Hakanen and Schaufeli, 2012; Ng and Feldman, 2010).

This study therefore contributes to literature in several ways. First, it broadens the unique insight of how JE is related to life satisfaction. Second, it contributes to an understanding of how gender differences can influence JE and subsequently life satisfaction. Third, it shows how individuals’ community embeddedness influences their organisation embeddedness, and subsequently their life satisfaction. Finally, it enlightens us on how IWBs mediates the relationship between JE and life satisfaction. In addition to these theoretical contributions, the findings provide important practical guidelines for managers who seek to enhance the well-being of staff.

Theoretical Framework and Hypotheses Development
**Job Embeddedness (JE)**

Drawing on Lewin’s (1951) field theory and the notion of embedded figures, Mitchell et al. (2001) developed JE theory, which explains why people stay in their jobs. As a perceptual construct (Charlier, Guay and Zimmerman, 2016), JE refers to a collection of social, psychological, financial and environmental forces that enmesh individuals into a psychological field or life space (Allen Peltokorpi and Rubenstein, 2016; Kiazad, Holtom, Hom and Newman, 2015). JE is unique because it focuses on both work and non-work forces (Lee et al., 2004) that cause employees to become enmeshed in their current job (Charlier et al., 2016; Eberly, Bluhm, Guarana, Avolio and Hannah, 2017; Treuren, 2017).

As noted, JE comprises two dimensions: on-the-job (or organisation) embeddedness, which is an employee’s extent of entrenchment or ties with/in an organisation; and off-the-job (or community) embeddedness, which is an employee’s level of entrenchment or attachment with/in a residential community (Crossley et al., 2007; Hussain and Deery, 2018; Darrat, Amyx and Bennett, 2017). Each of the two dimensions of JE comprises an additional three sub-dimensions: ‘links’ (i.e. the formal and/or informal connections that people have with other individuals and groups in the organisation and community); ‘fit’ (i.e. an individual’s perceived compatibility with his or her workplace and residential community); and ‘sacrifice’ (i.e. perceived psychological or material costs associated with a person’s departure from his or her organisation and residential community) (Allen et al., 2016; Kiazad et al., 2015; Mitchell et al., 2001). Individuals who have many links, perceive good fits and anticipate significant personal sacrifices associated with leaving, are likely to be embedded in their organisations and communities (Mitchell et al., 2001). Given that the JE construct captures employee perceptions of a wide range of work and non-work
factors that are directly relevant to life satisfaction, the construct is well suited as a predictor of life satisfaction (Ampofo et al., 2017).

**Life Satisfaction**

Life satisfaction refers to a person’s cognitive evaluation of his or her life (Diener, 1984). It denotes an evaluative judgment and is usually premised on a person’s self-imposed standards and the extent to which such standards are satisfied (Pavot and Diener, 1993; 2008). Life satisfaction is related to a number of outcomes such as burnout and job performance (Haar and Roche, 2010; Jones, 2006). Life satisfaction is a component of subjective wellbeing (SWB) and while it is related to the affective components of SWB (i.e. negative affect and positive affect) (Extremera and Rey, 2016), it differs from the affect components because life satisfaction is a relatively stable component which relates to the cognitive aspect of SWB. In contrast, affect involves temporary assessments of a person’s daily life and focuses on the emotional aspect of SWB (Hamama, Ronen, Shachar and Rosenbaum, 2013; Keyes, 2006; Lucas and Donnellan, 2007).

Because there is no single comprehensive theory of life satisfaction, scholars draw on and differentiate between top-down and bottom-up perspectives (Erdogan et al., 2012). The top-down perspective treats life satisfaction as a function of stable traits such as personality traits (e.g., neuroticism, agreeableness, extraversion, conscientiousness, and openness) (Erdogan et al., 2012; Steel, Schmidt and Shultz, 2008). Thus, life satisfaction is simply a function of the person (Erdogan et al., 2012). On the other hand, the bottom-up perspective views life satisfaction as a function of satisfaction with life domains such as such as work, family, health, and leisure (Erdogan et al., 2012; Heller, Watson and Ilies, 2004; Pavot and Diener, 2008). The bottom-up approach proposes that individuals regard life satisfaction as a multifaceted function of satisfaction with different life
domains, and individuals vary in how they evaluate each domain (Erdogan et al., 2012). Several studies support the ‘bottom-up’ approach (e.g., Georgellis and Lange, 2012; Moser and Schuler, 2004), and this study adopts this approach because it regards life satisfaction as a function of different life domains (Erdogan et al., 2012).

**JE-life Satisfaction Relationship**

As noted above, the unique strength of JE lies in its ability to use work and non-work factors through the forces of ‘links’, ‘fit’, and ‘sacrifice’ to predict a range of organisational outcomes (Mitchell et al., 2001; Lee et al., 2014). Similarly, in our view, JE has the capability to predict personal outcomes for employees, because the quality of work and non-work life are likely to influence the life satisfaction of embedded employees (Erdogan et al., 2012). Lucas, Clark, Georgellis and Diener (2004) asserted that life events, which comprise work and non-work activities, may have a strong influence on a person’s life satisfaction. Research indicates that several work-related factors such as pay, social support from supervisors and co-workers, employment status, and promotion opportunities are related to employees’ life satisfaction (e.g., Judge and Locke, 1993; Diener and Oishi, 2000; Huffman, Watrous-Rodriguez and King, 2008; Michel et al., 2009; Aquino, Russell, Cutrona and Altmaier, 1996). In regard to the non-work domain, the community where people live has been shown to be a source of life satisfaction for individuals who have strong ties to, and receive support from family members, friends and influential members of the community (Roh et al., 2015), and for those who actively engage in social events such as sport and entertainment events such as local theatre (Mitchell et al., 2001; Ardahan and Mert, 2013; Adams, Leibbrandt and Moon, 2011). Studies show that higher-fitted community members are likely to be satisfied with life (Jiang and Jiang, 2015), because they experience high positive mood, physical well-being, and mental health (Gareis and Barnett, 2008;
Roosa et al., 2009). Research also shows that people’s sense of community is related to their life satisfaction (Oh, Ozkaya and LaRose, 2014; Prezza, Amici, Roberti and Tedeschi, 2001). The more people feel part of the community, the more they become satisfied with life (Martini and Sequi, 1995; Prezza et al., 2001). Because individuals revere the benefits they receive from the organisation and community that enhance their life satisfaction, they may be reluctant to surrender these benefits by leaving their work organisation or community (Mitchell et al., 2001; Erdogan et al., 2012).

Conservation of Resources (COR) theory (Hobfoll, 1989) can also be used to explain the relationship between JE and life satisfaction. COR theory proposes that individuals are motivated to acquire, protect and retain their valued resources (e.g., time, relationships, perks, development opportunities, health, and benefits), and are threatened by actual or potential loss of these resources (Hobfoll, 1989, 2001; Kiazad, Seibert and Kraimer, 2014). JE has been conceptualised as a state of abundant resources: ‘links’ represents relational resources which are generated when people build social ties with other people in their organisations and communities; ‘fit’ represents a sense of belonging resource that people feel through being part of their organisations and communities; and ‘sacrifice’ represents the primacy-of-loss tenet of COR theory, which is consistent with the idea that people find it hard to give up resources when they leave their organisations and residential communities (Gorgievski and Hobfoll, 2008; Wheeler, Harris and Sablynski, 2012). Kiazad et al. (2014) theorised links and fit as instrumental resources (i.e., resources that enable a person to acquire valued resources and additional resources), and sacrifice as an intrinsically valued resource. Because highly embedded individuals have relatively greater instrumental resources, they have the capability to acquire additional resources in the organisation (e.g., access to development opportunities, perks) and in the community (e.g., family support, community support
for political office), which may enhance their life satisfaction. Furthermore, individuals with many sacrifices in the organisation and community are more likely to be satisfied with life, because they understand that leaving means forfeiture of intrinsically valued resources, which could result in lower life satisfaction (Mitchell et al., 2001; Grandey and Cropanzano, 1999; Hobfoll, 1989; Kiazad et al., 2015). Consistent with the foregoing arguments, we therefore hypothesise that:

\[ H1: \text{JE will be positively related to life satisfaction.} \]

**Moderating Roles of Gender and Community Embeddedness**

Social Role Theory proposes that men and women differ on a number of attributes because of different gender role expectations (Eagly and Wood, 1991). These attributes can be classified as communal and agentic attributes (Eagly, 1987). Women, more than men, are associated with communal attributes, such as being friendly, altruistic, emotionally expressive, sympathetic, nurturing, and concerned about others (Eagly, 2009; Eagly and Wood, 1991). On the other hand, men, more than women, are associated with agentic attributes, such as being independent, assertive, dominating, and instrumentally competent (Eagly, 2009; Eagly and Wood, 1991). The communal attributes of women may lead them to place relatively greater importance on links with other people in their organisations and communities (Allen, 2006; Koenig, Lee, Fields and Macmillan, 2011). For women, leaving their organisations and communities may result in significant emotional costs when they sever their social ties (Jiang, Liu, McKay, Lee and Mitchell, 2012). Consistent with the foregoing reasoning, Ryan and Harden (2014) found that female participants anticipated relatively greater personal sacrifices should they decide to leave their work organisations. Similarly, in a meta-analyses that used 65 independent samples, Jiang et al. (2012) found that females were more embedded in their organisations than males. Consistent with the foregoing arguments, we hypothesise that:
H2. Gender will moderate the JE-life satisfaction relationship, such that the relationship is stronger for female employees than for male employees.

Employees who are highly embedded in the communities where they live will be motivated to sustain their employment in the current location and make strategic decisions to become embedded on the job (Feldman, Ng and Vogel, 2012). Therefore, if employees are highly embedded in their communities, they may find ways to enhance their organisation embeddedness to secure their jobs and avoid geographical relocation, which might be necessary if they lose their jobs (Ng and Feldman, 2014). The effects of community embeddedness on organisation embeddedness can also be explained with reference to COR theory which proposes that people who have accrued surplus resources in one life domain may invest those resources for use in other domains as needed (Hobfoll, 1989). Thus, people may become embedded in their work organisation as a result of the accumulated surplus resources they have in their residential community (Hobfoll, 1989; Ng and Feldman, 2014). For example, employees who are highly embedded in their communities can develop strong networks of support (e.g., child care support, school lift clubs) that afford these employees the time and energy to participate in additional training and career development programs at work (Ng and Feldman, 2014). Consistent with the foregoing arguments, we hypothesise that:

H3. Community embeddedness will moderate the relationship between organisation embeddedness and life satisfaction, such that the relationship is stronger for people who are highly embedded in their community.

Mediating Role of Innovation-related Work Behaviours (IWB)

Janssen (2000) defined IWB as “intentional creation, introduction and application of new ideas within a work role, group or organisation, in order to benefit role performance, the group, or the
organisation” (p. 288). In other words, IWB refers to an employee’s extra-role behaviour that involves the introduction and implementation of novel ideas to enhance existing work processes or routines (Axtell et al., 2000; Welbourne, Johnson and Erez, 1998). Although ‘creativity’ and ‘innovation’ are related, they are different in that creativity involves producing new ideas that are potentially beneficial to an organisation (Amabile, 1988; Oldham and Cummings, 1996), whereas innovation transcends producing new ideas to include the implementation of novel ideas, thereby creating benefits for the organisation (De Jong and Den Hartog, 2010; Scott and Bruce, 1994). Thus, creativity is often identified as a subset of IWB (De Jong and Den Hartog, 2010; Janssen, 2004). IWB involves three non-sequential and separately engaged stages: idea creation, idea promotion and idea implementation (Janssen, 2000; Scott and Bruce, 1994).

Studies show that employees who are highly embedded in their organisation have a greater propensity to enact IWBs. For example, Ng and Feldman (2010) theorised and demonstrated empirically that organisation embeddedness was positively and significantly related to IWBs. They argued that employees will share ideas and constructive feedback more readily and more quickly with others when they experience a high level of fit with their work environment. Furthermore, they asserted that highly embedded employees find it easier and faster to spread their innovative ideas across the organisation because they have relatively more and stronger links in the organisation. They also argued that because leaving the organisation is associated with potential sacrifices, highly embedded employees have strong incentives to enact IWBs so that the economic viability of the organisation is sustained and their jobs are secured. Coetzer, Inma, Poisat, Redmond and Standing (2018) examined associations between organisation embeddedness and IWBs in small and large organisations. They also found that organisation embeddedness was
positively related to IWB, and that the relationship between the focal variables was stronger among employees in small organisations than in larger organisations.

To explain the link between IWB and life satisfaction we draw on COR theory (Hobfoll, 2001, 2011). From the perspective of COR theory, IWBs can be viewed as a source of resource gain for employees (Hobfoll, 2011; Kiazad et al., 2014). When employees enact IWBs they create the impression that they are competent and good organisational citizens who are concerned about the wellbeing of organisation (Seibert, Kraimer and Crant, 2001; Fuller, Barnett, Hester, Relyea and Frey, 2007; Bolino, 1999). Consequently, these innovative employees are likely to accrue valued resources, such as pay increases, perks, benefits, job security, promotion, recognition, and social support from peers and supervisors (Seibert et al., 2001; Halbesleben, Neveu, Paustian-Underdahl and Westman, 2014). Studies show that individuals who enjoy the benefits of abundant job resources, such as supervisor and co-worker support, job security, and promotion opportunities, tend to report greater levels of life satisfaction (e.g., Thompson and Prottas, 2006; Iverson and Maguire, 2000; Luhmann, Weiss, Hosoya and Eid, 2014; Carr and Chung, 2014; Green, 2011). Consistent with the foregoing arguments, we hypothesise that:

\[ H4. \text{ IWB will mediate the relationship between organisation embeddedness and life satisfaction.} \]

Method

Participants included 90 professionals enrolled in a part-time executive MBA programme at the Nelson Mandela Metropolitan University in South Africa. Following a snowball sampling approach (Hair, Money, Samouel and Page, 2007), the 90 professionals were asked to recruit at least five participants from their respective organisations. Potential participants were informed that
participation was voluntary and that responses were anonymous. As elaborated on below, all the participants were asked to assess their own level of embeddedness and to rate their life satisfaction and engagement in innovation behaviours. The participant recruitment procedures resulted in 549 participants drawn from organisations located in four major metropolitan centres. Ninety-four percent of the sample was employed full time and the mean tenure of participants was about seven years. The majority of participants were female (53%) and 76% of all participants were under 40 years of age. Eighty-five percent of the participants had a post high school qualification and of these respondents, 64% had completed a university degree. The home language of participants was as follows: English 35%; Xhosa 33%; Afrikaans 20%; Zulu 4%; and Other 8%.

**Measures**

*Job embeddedness:* Holtom, Mitchell and Lee (2006) developed and validated a 21-item short form of the original 40-item JE scale published in the seminal article by Mitchell et al. (2001). In their measure development study, Holtom et al. (2006) found a strong correlation \((r = .92)\) between the original instrument and the short form and no difference in amount of variance in turnover explained by the original and short version. Subsequently, the shorter scale has been successfully used by other researchers (e.g., Felps et al., 2009). When using the short scale respondents indicate on a five-point scale the extent to which they agree with 18 of the 21 items.

Nine of the 18 dimensional items assess respondents’ perceptions of on-the-job factors and the other nine assess perceptions of off-the-job factors. The remaining three items require yes/no answers and are additional measures of off-the-job factors. This study did not use the three dichotomous questions (i.e. Are you married? Does your spouse work outside the home? Do you own a home? With, or without, a mortgage?). In the current study, \(\alpha\) reliabilities for on-the-job and off-the-job embeddedness were .82 and .76 respectively.
Life satisfaction: Diener, Emmons, Larsen and Griffin’s (1985) five-item Satisfaction with Life Scale (SWLS) was used to measure life satisfaction. We used a five-point Likert scale where 1= strongly disagree and 5= strongly agree. A sample item is “I am satisfied with my life”. Diener et al.’s (1985) study found an internal consistency score of .87 and a 2-week test–retest correlation of .82. Filiz (2014) reported α reliability of .89. The α reliability was .86 in this study.

Innovative work behaviour: De Jong and den Hartog’s (2010) six items were used to measure respondents’ engagement in four dimensions of innovation-related behaviours: idea exploration, idea generation, idea championing, and idea implementation. We used a five-point Likert-type scale where 1= never and 5= very often. A sample item is “In your job how often do you acquire new knowledge externally to improve the way you do your job”. The α reliability was .89 in this study. Self-ratings of individual innovative work behaviour has been used in prior studies (e.g., Janssen, 2000; Ng and Feldman, 2010), and self-ratings show considerable convergent validity with supervisor-ratings of innovation-related work behaviour (De Jong and Den Hartog, 2010). Employees are generally better positioned than observers (such as peers and supervisors) to evaluate how frequently and intensely they have explored, generated, championed and implemented new ideas within their organisations (Ng and Feldman, 2013).

Control variables: Age and job satisfaction were used as control variables because these variables have been found to affect life satisfaction and IWB (Jung, Chow and Wu, 2003; Kongarchapatara, Moschis and Sim Ong, 2014; Rode, 2004). We measured job satisfaction with the three-item measure used by Mitchell et al. (2001). The α reliability was .85 in their study and .77 in this study. Respondents were asked to indicate their age by selecting one of the following categories: under 30; 30-40; 41-50; 51-60; 61+. 
Data Analysis

We used the expected maximisation method of missing value analysis to replace missing values. One item of the job satisfaction construct (i.e. In general, I don’t like my job) was reverse scored. Means and standard deviations were produced, and correlations among variables were determined. With AMOS, we used a two-step approach to structural equation modelling (SEM), determining the measurement model (i.e. confirmatory factor analysis– CFA) and then the structural models (Anderson and Gerbing, 1988; Hair et al., 2010). We used the following model fit indices: CMIN/DF ($\chi^2$/df) < .05; Chi square ($\chi^2$) p value > .05; goodness-of-fit index (GFI) ≥ .90; adjusted goodness-of-fit index (AGFI) ≥ .90; root mean square residual (RMR) < .08; comparative fit index (CFI) ≥ .90; Tucker-Lewis index (TLI) = > .95; root mean square error of approximation (RMSEA) < .05, PCLOSE > .05 (Chau, 1997; Mulaik et al., 1989; Hu and Bentler, 1999).

We used SEM to test the relationship between JE and life satisfaction (Hypothesis 1). Covariances that were not significant in the SEM path analysis were deleted. We used Hayes’ (2013) PROCESS macro (version 2.16) to test indirect (mediation) and conditional (moderation) effects. In the PROCESS macro, we bootstrapped the observed sample to 5000 at 95% confidence interval to determine the effects of the hypothesised moderators and mediator. Following MacKinnon, Lockwood and William (2004), we used bias-corrected confidence interval because it adjusts for any bias in the bootstrap estimate, and produces the most precise confidence intervals in bootstrapping. Significant effect is obtained in Hayes’ PROCESS macro when confidence intervals do not exceed zero. In this study, we used Model 1 (i.e. simple moderation analysis) to test ‘gender’ as potential moderator variables, thus hypotheses 2. A graph was used to illustrate the conditional effect of organisation embeddedness on life satisfaction. Due to the moderated mediation analysis, we used Model 5 to test the potential mediating role of IWB, and moderating
role of community embeddedness in the organisation-life satisfaction relationship. We did not illustrate the conditional effect of organisation embeddedness on life satisfaction with a graph, because Model 5 does not generate the data for plotting the graph. We used common latent factor (CLF) analysis (i.e. difference between CFA with no CLF and CFA with CLF) to test for common method bias (CMB) and the results indicated that CMB was not an issue because all the differences were less than 0.2 (Podsakoff, MacKenzie, Lee and Podsakoff, 2003).

Results

Table I shows the means, standard deviations, correlations, and CFA results. Significant and positive correlations are found between: IWB and life satisfaction; JE and life satisfaction; organisation embeddedness and life satisfaction; community embeddedness and life satisfaction; job satisfaction and life satisfaction; and age and life satisfaction. However, no significant correlation is found between gender and life satisfaction.

The results also show adequate convergent validity, because average variance extracted (AVEs) and standardised factor loadings exceed .50, and composite reliabilities (CRs) are greater than AVEs (Anderson and Gerbing, 1988; Hair et al., 2010). In addition, the results show adequate discriminant validity, because maximum shared variance (MSVs) exceed AVEs, AVEs are greater than average shared variance (ASVs), and the square root of AVEs are above inter-construct correlations (Fornell and Larcker, 1981; Hair et al., 2010). Furthermore, Cronbach’s α and CRs of all the items exceed .70, indicating adequate construct reliability (Hair et al., 2010; Sekaran, 2003). Moreover, the CFA results show the good fit of the structural model: ($\chi^2= 306.356$, df= 2.157, p= .000), RMR= .035, GFI= .944, AGFI = .925, CFI= .967, TLI = .960, RMSEA= .04, and PCLOSE = .822).
Table II shows the path relationship between JE and life satisfaction. The results show a good statistically fit model: ($\chi^2 = .420$, $\chi^2/df = .210$, $p = .811$), $\text{RMR} = .003$, $\text{GFI} = 1.000$, $\text{AGFI} = .998$, $\text{CFI} = 1.000$, $\text{TLI} = 1.021$, $\text{RMSEA} = .000$, $\text{PCLOSE} = .945)$. The results also show a significant and positive relationship between JE and life satisfaction. Thus, an increase in JE will correspond to an increase in life satisfaction. The results support hypothesis 1.

Table III shows results relating to the moderating role of gender in the relationship between JE and life satisfaction. Prior to introducing the interaction term, the results show a good model fit, and a $R^2$ of .2997, which means that approximately 30% of the variance in life satisfaction is explained by JE, job satisfaction, gender, and age. When the interaction term is introduced, the results show a $\Delta R^2$ of .0072 ($p < .001$), which represents that about 1% of the variance in life satisfaction is explained by the interaction term (i.e. gender and JE). In addition, the results show that gender moderates the JE-life satisfaction relationship ($B = .2511$, $\text{LLCI} = .4750$, $\text{ULCI} = .0271$). Furthermore, the results indicate that the JE-life satisfaction relationship is stronger among female employees than their male counterparts. Figure 3 also shows that the relationship between JE and life satisfaction is stronger among females than males. Thus, the results support hypothesis 2.
Table IV shows results relating to the moderating role of community embeddedness, and mediating role of IWB in the organisation embeddedness–life satisfaction relationship. The results indicate the model adequately fits the statistics. The results also show a $R^2$ of .3066 ($p < .001$), which means that about 31% of the variance in life satisfaction is explained by organisation embeddedness, community embeddedness, IWB, job satisfaction, age, gender, and the interaction term. Additionally, the results demonstrate that community embeddedness moderates the relationship between organisation embeddedness and life satisfaction ($B = .4718$, LLCI = .1609, ULCI = .5668). Furthermore, the results show that the organisation embeddedness-life satisfaction relationship is stronger when people are highly embedded in their community, thereby confirming hypothesis 3.

Finally, the results show significant and positive relationships between: organisation embeddedness and IWB; IWB and life satisfaction; and organisation embeddedness and life satisfaction. The results show that IWB mediates the organisation embeddedness-life satisfaction relationship ($B = .0329$, LLCI = .0031, ULCI = .0764), which supports hypothesis 4.

Discussion

JE researchers have yet to focus on the personal benefits of embeddedness for employees. From a stakeholder perspective of organisational effectiveness, such a research focus is necessary because
employees are key stakeholders whose needs must also be satisfied (Carroll, 1991; Hubbard, 2009. Results of our exploratory study provide several contributions to this research direction and suggest avenues for future research.

Theoretical Contributions and Avenues for Future Research

First, our analyses suggest that there is a significant, positive relationship between overall JE and employees’ life satisfaction. This result is in accordance with the findings of studies which show that individuals’ life satisfaction is influenced by their levels of satisfaction with their work life and non-work life (e.g., Judge and Locke, 1993; Aquino et al., 1996; Roh et al., 2015). Furthermore, the result that JE is positively related to life satisfaction is consistent with the tenets of COR theory (Hobfoll, 1989; 2001) and the view that high JE represents a state of abundant resources (Wheeler et al., 2012). A state of abundant organisational and community resources mitigates individuals’ experiences of stress, depression, anger and burnout, all of which erode employees’ evaluations of their life satisfaction (Kiazad et al., 2015; Ozkan and Ozdevecioğlu, 2013; Schaufeli, Bakker and Van Rhenen, 2009). Thus, the more employees are embedded in their work organisation and in the community where they live through the notions of links, fit and sacrifice, the more likely they will be satisfied with life.

Although results of this study suggest that JE positively influences life, we think that there is a plausible case for reverse causality. That is, an individual’s life satisfaction could influence his or her embedding process. Employees with high levels of life satisfaction may make a conscious decision to proactively embed themselves in their job (Amah, 2009; Feldman et al., 2012). Thus, individuals who are satisfied with both their work life and community life would prefer to stay in their current job in order to optimize their lives. Future research should consider examining the causality directions of JE and life satisfaction to determine which variables has the
greatest influence on the other over time. Another worthwhile line of inquiry would be to examine whether an individual’s current level of life satisfaction influences their future level job embeddedness, and vice versa.

Second, the results suggest that female employees tend to be more highly embedded in their work organisations and communities and consequently experience relatively higher levels of life satisfaction than male employees. This finding is consistent with findings of prior studies that show females tend to report higher levels of embeddedness than males (e.g., Jiang et al., 2012; Ryan and Harden, 2014). Women place relatively greater importance on building and maintaining social attachments with others in their work organisations and communities (Allen, 2006; Eagly, 2009; Koenig et al., 2011) and strong social ties increase life satisfaction (Lim and Putnam, 2010). When contemplating leaving their work organisations and residential communities, women are likely to anticipate substantial emotional costs associated with severing their links (Jiang et al., 2012).

Future research could contribute to developing a more nuanced understanding of the interrelations among JE, life satisfaction and gender by examining the potential moderating effects of family role salience and career role salience in male and female samples. Role salience refers to the importance that individuals place on their family role and their career role (Wolfram and Gratton, 2014). Role importance also denotes how prominently these roles are used for self-definition (Bagger, Li and Gutek, 2008) and indicates a tendency to invest more time and effort in the respective domains (Cinamon and Rich, 2002). We anticipate that the salience of these two roles for male and female employees may influence their levels of JE and thence their life satisfaction. Family role and career role salience can be assessed with the two, four-item scales that were employed by Eddleston, Veiga and Powell (2006) in their study. Sample items are as
follows: “A major source of satisfaction in my life is my career [family]”; Most of my interests are centered around my career [family].”

Third, our results indicate that the relationship between organisation embeddedness and life satisfaction is stronger among highly community embedded employees. Thus, the additional resources (e.g., social ties with family and friends, childcare support) that highly community embedded employees possess contributes to their life satisfaction. This finding is consistent with the ‘bottom-up’ perspective of life satisfaction, which views life satisfaction as a function of satisfaction with different life domains (Erdogan et al., 2012; Heller et al., 2004). The result is also consistent with the assertion that highly community embedded individuals may develop better networks of support services, such as daycare and babysitting, which would enhance their embeddedness at work, and thereby influence their life satisfaction (Feldman et al., 2012; Herrero and Gracia, 2007).

As originally conceptualised by Mitchell and colleagues (2001), community embeddedness refers to the non-work factors that directly influence an individual’s decision to stay in his or her job. However, there are instances where an individual’s embedding process could occur by proxy, that is, family members such as a spouse, children or elderly parents may indirectly influence an individual’s embedding process (Feldman et al., 2012; Hirsch and Shanley, 1996). For instance, an individual may be embedded in a job as a result of his or her spouses’ job in the current location or children’s access to good schools in the local community. Because individuals draw satisfaction with life from the family (Roh et al., 2015), future research should expand the components of community embeddedness to include proxy items relating to family members’ embeddedness in the community. Moreover, research shows that individuals who are embedded by the forces of their family unit are more likely to stay at work than those who are embedded in their community.
Thus, it will be a worthwhile line of inquiry to determine whether family embeddedness has stronger conditional effect on the organisation embeddedness-life satisfaction relationship than community embeddedness.

Fourth, our results suggest that IWB is a potential mechanism through which employees who are highly embedded in their organisations become more satisfied with their lives. This finding supports Huhtala and Parzefall’s (2007) contention that IWB should not always be conceptualised as just a job demand, because it also has a job resource component which engenders positive outcomes. Thus, employees who are highly embedded in their organisations as a result of acquired work resources (e.g., favorable feelings about the employment relationship, social ties with coworkers, and a strong desire to keep their jobs and job-related rewards) will be motivated to engage in extra-role behaviours associated with idea creation, promotion and implementation (Amabile et al., 1996; Ng and Feldman, 2010; Parker, Williams and Turner, 2006). Employees who engage in such extra-role IWBs report higher levels of wellbeing (e.g., Honkaniemi, Lehtonen and Hasu, 2015; Janssen, 2004).

Although our results suggest that IWB mediates the organisational embeddedness-life satisfaction relationship, we cannot rule out that IWB may be an expression of employees’ work engagement. The concept work engagement has been conceptually and empirically linked to IWB. For example, Macey and Schneider (2008) have argued that there are three facets of engagement: trait engagement, psychological state engagement, and behavioural engagement. They conceptualise psychological state engagement (e.g., feelings of vigour and absorption) as an antecedent of behavioural engagement and assert that engagement behaviours include innovative behaviours. Regarding empirical evidence for a link, Bakker and Xanthopoulou (2013) surveyed 84 female school principals and 190 teachers and found a positive relationship between principals’
levels of work engagement and teachers’ ratings of principals’ creative task performance. Creativity is a critical element of IWB, particularly at the start of the innovation process when problems or performance deficiencies are identified and ideas are generated in response to a perceived need for innovation (De Jong and den Hartog, 2010). Finally, Hakanen and Schaufeli (2012) used COR theory to provide a theoretical rationale for a link between work engagement and life satisfaction and demonstrated empirically that work engagement is significantly and positively related to life satisfaction. Given these conceptual and empirical linkages, we suggest that future studies should examine the potential mediating role of work engagement in the organisation embeddedness-life satisfaction relationship.

**Practical Implications**

Managers could adopt at least three strategies to increase employees’ life satisfaction. First, managers could enhance employees’ life satisfaction through activities that increase on-the-job and off-the-job embeddedness. For example, the quantity and quality of links could be enhanced through formal and informal mentoring of employees, putting employees on long-term projects, and encouraging employee involvement in volunteer and philanthropic activities. Perceptions of fit can be strengthened through carefully matching employees’ skills, knowledge and abilities with work requirements. Finally, employees’ perceptions of personal sacrifices associated with leaving could be heightened through the provision of perks that affect employees’ private life, flexible working arrangements, and longevity-based benefits (Holton and O’Neill, 2004; Lee et al., 2004; Mitchell et al., 2001; Rode, 2004). Second, managers could enhance employee life satisfaction by not making excessive job demands that are likely to negatively affect home life (Wolfram and Gratton, 2014). Third, organisations could encourage employees’ IWBs through workplace
supervisors’ supportive responses to innovative employees. Furthermore, managers could provide employees with resources (e.g., creativity training sessions, idea suggestion systems) that foster employee engagement in IWBs (Devloo, Anseel, De Beuckelaer and Feys, 2016; Janssen, 2005). Such behaviours are known to increase employee wellbeing (Honkanemi et al., 2015).

**Methodological Limitations and Implications for Further Research**

This study has limitations that should be addressed in future research. First, the use of cross-sectional data and a non-random sampling procedure for participant recruitment rules out causal conclusions and limits generalisability of the results. Therefore, future research should consider employing random sampling procedures to minimise sample bias and use longitudinal research designs in order to make causal conclusions. As noted, an individual’s life satisfaction could influence his or her level of JE (Amah, 2009; Feldman et al., 2012). Therefore, to reach causal conclusions, research designs that incorporate multiple time lags (e.g., 6 months, year 1, year 2, and year 5) should be used. Such research designs would enable researchers to examine the effects of an individual’s current level of embeddedness on his or her future life satisfaction, and vice versa. Second, although our CMB test results did not raise any concerns, we encourage future studies to employ techniques for controlling CMB, such as introducing a time lag between measurement of JE and life satisfaction (Podsakoff et al., 2003). Third, employee SWB comprises a cognitive component (i.e. life satisfaction) and an affective component (i.e. positive and negative affect) (Hamama et al., 2013). The present study focused on just the cognitive component of SWB. Therefore, the affective aspect of SWB should be included in future studies. That is, future research should control for the confounding effects of affectivity traits on the relationship between JE and life satisfaction, because peoples’ affectivity traits influence their life satisfaction (Joshanloo, 2016; Huebner and Dew, 1996). Fourth, this study examined the moderating effects of gender on
the JE-life satisfaction relationship. However, other demographic variables, such as age and education might also moderate the relationship (Peltokorpi, Allen and Froese, 2015). Finally, the use of self-report scores of life satisfaction may generate socially desirable responses. Therefore, future research should complement self-reports with informant reports of life satisfaction, such as life satisfaction estimates provided by family and close friends of the target participants (Diener et al., 2013).

To minimise the limitations relating to sampling method and common method bias, we used rigorous analytical techniques. For example, Hayes’ PROCESS macro was used to bootstrap samples to 5000 at 95% bias-corrected confidence intervals in order to determine the indirect effect, and conditional effects on the relationships (Preacher and Hayes, 2004, 2008; Zhao, Lynch Jr. and Chen, 2010). Also, common latent factor analysis was used to statistically test common method bias (Podsakoff et al., 2003).

References


Table I: Means, standard deviations, correlations, and confirmative factor analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Cronbach’s alpha</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
<th>SQRT of AVE</th>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td></td>
<td></td>
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<td></td>
</tr>
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<td>2. Gender</td>
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<td>-</td>
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<td>.108</td>
<td>-.090*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.767</td>
<td>.745</td>
<td>.524</td>
<td>.246</td>
<td>.129</td>
<td>.724</td>
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<td>.013</td>
<td>.499***</td>
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<td>-</td>
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<td>.830</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>5. Organisation embeddedness</td>
<td>3.65</td>
<td>.664</td>
<td>.091*</td>
<td>-.074</td>
<td>.680***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.856</td>
<td>.779</td>
<td>.546</td>
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<td>.771</td>
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<td>.120**</td>
<td>-.150***</td>
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<td>.757</td>
<td>.517</td>
<td>.108</td>
<td>.040</td>
<td>.719</td>
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<td>7. Innovative work behaviour</td>
<td>3.26</td>
<td>.842</td>
<td>.074</td>
<td>-.128**</td>
<td>.246***</td>
<td>.269***</td>
<td>.372***</td>
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<td>.901</td>
<td>.605</td>
<td>.188</td>
<td>.085</td>
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</tbody>
</table>

Note: N= 549. Gender is coded 1= Male, 2= Female. Age is coded 1= under 30, 2= 30-40, 3= 41-50, 4= 51-60, 5= 61+. *p< 0.05; **p< 0.01; ***p< 0.001 (two-tailed). SD= Standard deviation; AVE = average variance extracted; Values; MSV = maximum shared variance; ASV = average shared variance; CR = composite reliability.
Table II: Standardised regression weights

<table>
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<tr>
<th></th>
<th>β</th>
<th>SE</th>
<th>t-value</th>
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<tbody>
<tr>
<td>Life satisfaction &lt;-- Age</td>
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<td>.032</td>
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<td>Life satisfaction &lt;-- Gender</td>
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<td>.058</td>
<td>2.048</td>
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<td>Life satisfaction &lt;-- job satisfaction</td>
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<td>.042</td>
<td>4.813</td>
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<td>Life satisfaction &lt;-- job embeddedness</td>
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<td>.062</td>
<td>9.249</td>
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</table>

Note: β = standardised coefficient; SE = standard error. *p< 0.05; ***p < 0.001 (two-tailed).

Table III: Results for moderating effect of gender on job embeddedness–life satisfaction relationship

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>t-value</th>
<th>95% bootstrapped CI</th>
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<td></td>
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<td>Lower Level Confidence Interval</td>
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<td>Age</td>
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<td>.0305</td>
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<td>.0257</td>
<td>.1007</td>
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<td>-.1725</td>
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<tr>
<td>Job embeddedness</td>
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<td>8.0127</td>
<td>.4349</td>
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<td>Gender</td>
<td>.1194*</td>
<td>.1140</td>
<td>2.0507</td>
<td>.0050</td>
</tr>
<tr>
<td>Int_1 (gender×_job embeddedness)</td>
<td>.2511*</td>
<td>.1348</td>
<td>-2.2018</td>
<td>.4750</td>
</tr>
</tbody>
</table>

\[
R = .5474***
\]
\[
R^2 = .2997***
\]
\[
\Delta R^2 (i.e. increase due to interaction) = .0072* \quad \quad \quad F(1, 543) = 4.8481^*
\]

Conditional effect of gender

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Male</td>
<td>.4591***</td>
<td>.0871</td>
<td>5.2743</td>
<td>.2881</td>
<td>.6301</td>
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<tr>
<td>Female</td>
<td>.7102***</td>
<td>.0967</td>
<td>7.3424</td>
<td>.5202</td>
<td>.9002</td>
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</table>

Note: B = unstandardised coefficient; SE = standard error. LLCI = lower level confidence interval; ULCI = upper level confidence interval. *p< 0.05; **p < 0.01 (two-tailed).
Table IV: Results for innovative work behaviour mediating, and community embeddedness moderating the organisation embeddedness–life satisfaction relationship

<table>
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<tr>
<th>Outcome variable</th>
<th>B</th>
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<th>t-value</th>
<th>LLCI</th>
<th>ULCI</th>
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</thead>
<tbody>
<tr>
<td><strong>Direct effects</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Innovative work behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
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<td>.0365</td>
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<td>-.0351</td>
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<td>.0857</td>
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<td>Organisation embeddedness</td>
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<td>.0684</td>
<td>7.0023</td>
<td>.3447</td>
<td>.6135</td>
</tr>
</tbody>
</table>

R = .3878***
R² = .1504***
F(4, 544) = 24.0795***

| Life satisfaction                      |      |      |         |       |       |
| Age                                   | .0650*| .0323| 2.0164  | .0017 | .1284 |
| Gender                                | .1416*| .0584| 2.4238  | .0268 | .2563 |
| Job satisfaction                       | .1345**| .0489| 2.7527  | .0385 | .2305 |
| Innovative work behaviour             | .1688*| .0370| 2.8572  | .0400 | .1415 |
| Organisation embeddedness             | .5385**| .1969| 2.7347  | .1517 | .9253 |
| Community embeddedness                | .4016| .2190| 1.8339  | -.0286| .8319 |
| Int_1 (community embeddedness × organisation embeddedness) | .4718*| .0580| 2.8125  | .1609 | .5668 |

R = .5537***
R² = .3066***
F(7, 541) = 34.1747***

**Conditional direct effects of community embeddedness**

| Low | .3499***| .0766| 4.5658 | .1994 | .5004 |
| average | .3862***| .0619| 6.2394 | .2646 | .5078 |
| High  | .4225***| .0760| 5.5586 | .2732 | .5717 |

**Indirect effect**

<table>
<thead>
<tr>
<th>Organisation embeddedness – innovative work behavior -&gt; life satisfaction</th>
<th>B</th>
<th>SE</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation embeddedness – innovative work behavior</td>
<td>.0329</td>
<td>.0201</td>
<td>.0031</td>
<td>.0764</td>
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</table>

B = unstandardised coefficient; SE = standard error. LLCI = lower level confidence interval; ULCI = upper level confidence interval. *p< 0.05; **p< 0.01; ***p < 0.001 (two-tailed).
Figure 1: Conceptual Framework.
Figure 2: Confirmatory factor analysis of the variables under study
Figure 3: Moderating role of gender in JE-life satisfaction relationship