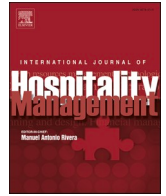




Contents lists available at ScienceDirect

International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhm

Full length article

Called to serve: A moderated mediation model of career calling, job embeddedness, ambition, and organizational citizenship behaviors among hospitality employees

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ARTICLE INFO

Keywords:

Career calling

Ambition

Job embeddedness

Organizational citizenship behaviors

Moderated mediation

ABSTRACT

A sense of calling is seen as crucial for finding meaning and purpose in one's work. This research examines how hospitality employees' career calling affects their helping behaviors toward colleagues and the organization and explores the boundary conditions under which this impact can be strengthened, drawing on career construction and personality-job fit theories. Utilizing one-year, multi-wave data from a matched sample of 199 hospitality workers and their supervisors, this study found that job embeddedness mediates the effects of career calling on two types of helping behaviors. Moreover, a moderated mediation analysis revealed that ambition further moderates these indirect effects, with stronger mediation effects for those with greater ambition. Theoretical and managerial implications for researchers and practitioners are discussed.

1. Introduction

In contemporary service economies, employees increasingly seek work that offers more than financial rewards or formal advancement opportunities. Work functions as a central source of identity and personal meaning, shaping how individuals engage with their roles and organizations (Miscenko and Day, 2016; Vianello et al., 2022). Among such orientations, career calling has emerged as a powerful motivational force, reflecting a belief that one's work constitutes a meaningful vocation rather than merely a job (Dik and Duffy, 2009; Hall and Chandler, 2005). Individuals with a strong calling orientation tend to (1) invest in skill development, (2) demonstrate persistence, (3) align their efforts with both personal and organizational values, and (4) pursue work goals that contribute to broader prosocial impact (Duffy and Dik, 2013). These motivational dynamics are important in hospitality contexts, which are characterized by labor intensity and a strong service

orientation (Croes et al., 2025). Indeed, hospitality organizations frequently face workforce instability, and pressure to maintain consistent service quality, making it essential to understand the motivational forces that encourage employees to remain committed and contribute to service delivery.

Although empirical research has linked career calling to positive work attitudes such as enhanced well-being and reduced turnover intentions (Kang et al., 2021; Lee, 2016; Lee et al., 2022), Park et al. (2024) noted that less attention has been paid to whether career calling translates into hospitality employees' discretionary behaviors beyond formal job requirements, such as organizational citizenship behavior (OCB). Organizational citizenship behavior refers to voluntary, extra-role behaviors that support individuals, groups, or the organization as a whole, thereby enhancing overall effectiveness (Sidorenkov et al., 2023). In service-intensive contexts such as hospitality, frontline performance is highly interdependent and service encounters are

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<https://doi.org/10.1016/j.ijhm.2026.104780>

Received 2 October 2025; Received in revised form 20 May 2026; Accepted 23 May 2026

Available online 1 June 2026

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dynamic (McManus et al., 2025). Under such conditions, formal job descriptions are often insufficient to ensure smooth service delivery, as employees must frequently coordinate their efforts and respond flexibly to changing customer needs. Consequently, discretionary behaviors that support both coworkers and the organization, become essential for maintaining service quality (Croes et al., 2025). Hospitality therefore provides a theoretically meaningful context for examining how career calling translates into discretionary performance (Bai and Zhang, 2025).

Moreover, limited research has examined the psychological mechanisms and boundary conditions through which career calling translates into discretionary behaviors, particularly in service-intensive hospitality contexts (Ma et al., 2022). Drawing on career construction theory (Savickas, 2002), this study proposes job embeddedness as a key psychological mechanism linking career calling to OCB. Career construction theory conceptualizes careers as evolving processes through which individuals develop vocational identities that provide meaning and direction to their work lives (Ampofo and Karatepe, 2022; Savickas, 2002). Within this framework, career calling represents an identity-based orientation that imparts personal significance to work, whereas job embeddedness reflects the extent to which this orientation becomes structurally and relationally grounded within the organization. Job embeddedness reflects the extent to which employees feel integrated into their roles through perceived fit, organizational relationships, and the perceived costs of departure (Mitchell et al., 2001). In highly interdependent work environments such as hospitality, these elements represent attachment and integration into collective functioning (Soltani Nejad et al., 2025). When individuals perceive their career as a calling, work becomes central to their concepts of 'self', strengthening their alignment with the organization (Ampofo and Karatepe, 2022; Savickas, 2002). This deeper embeddedness may cultivate a stronger sense of responsibility toward colleagues and the organization, thereby encouraging discretionary helping behaviors. Despite the hospitality industry's reliance on embedded employees to sustain service quality and teamwork, job embeddedness remains underexplored as a mediating mechanism through which career calling translates into helping behaviors.

Ambition can moderate the indirect effect that career calling has on helping behaviors via job embeddedness, by shaping how employees interpret and act upon their embedded position. Ambition reflects a strong orientation toward career advancement and personal achievement, influencing how hospitality employees seek recognition and invest effort in behaviors that both support service delivery and enhance their professional standing (Hirschi and Spurk, 2021). Drawing on personality-job fit theory (Kristof, 1996), employees may respond differently to the same workplace conditions, depending on their dispositional orientations. Accordingly, job embeddedness may carry different behavioral implications for employees with different levels of ambition. For highly ambitious employees, embeddedness may be interpreted as a state of deeper organizational integration in which daily service interactions occur within a dense relational network. In such contexts, helping behaviors during these interactions become more visible to others, and more likely to be interpreted as signals of competence and leadership potential, thereby strengthening the relationship between embeddedness and helping behaviors.

By contrast, for employees with lower levels of ambition, embeddedness may function primarily as relational stability and social connectedness, with weaker implications for discretionary helping behaviors. This distinction may be particularly relevant in hospitality settings, where career advancement often depends on highly visible service interactions and informally evaluated performance (Testa and Sipe, 2012). However, because ambition also involves competitive goal pursuit (Hirschi and Spurk, 2021), highly ambitious individuals may prioritize activities that more directly enhance their individual standing, potentially weakening the extent to which embeddedness translates into helping behaviors. Taken together, ambition may shape how job embeddedness is behaviorally expressed, either amplifying or

attenuating its influence on helping behaviors. Examining ambition as a boundary condition therefore provides a more nuanced understanding of when career calling translates into discretionary helping through job embeddedness in hospitality settings.

Drawing on career construction theory (Savickas, 2002), this study conceptualizes career calling as a meaningful, identity-based orientation toward work, while job embeddedness captures how this vocational identity becomes anchored within organizational life, subsequently shaping discretionary behavior. Building on this perspective, this study makes four primary contributions to the hospitality and career calling literature. First, this study extends career calling research (e.g., Lee, 2016) beyond traditional attitudinal and well-being outcomes by demonstrating how career calling translates into hospitality employees' helping behaviors toward both colleagues and the organization. Second, this study identifies job embeddedness as a key mechanism through which calling-informed vocational identities are translated into prosocial workplace behaviors. In doing so, the study shifts attention from career calling as merely an individual meaning-oriented construct (e.g., Lee et al., 2022) toward its role in shaping collective functioning within hospitality organizations. Third, integrating personality-job fit theory (Kristof, 1996), this study demonstrates that ambition serves as an important boundary condition that influences whether career calling translates into helping behaviors through job embeddedness. Finally, because the proposed relationships imply a temporally unfolding process, this study employs a one-year, multi-wave, multi-source design to provide a more rigorous examination of how career calling translates into helping behaviors over time. Collectively, these contributions also offer practical insights into how hospitality organizations can translate employees' career calling into helping behaviors by strengthening workplace attachment and organizational integration.

2. Literature review

2.1. Career calling and employees' helping behaviors

According to Dik and Duffy (2009, p. 427), calling can be defined as "a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation." Dik and Duffy further defined career calling as a profound sense of being drawn by an external, beyond-the-self force toward a specific career. This calling serves as both a source and an expression of one's broader sense of meaning and purpose in life. Additionally, it is driven by a motivation to fulfill the needs of others or contribute to their well-being. Such definitions underscore the profound personal and altruistic dimensions of career calling, highlighting how individuals perceive their work as more than just a job, as a meaningful pursuit that aligns with their core values and career goals.

Organizational citizenship behavior can be defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate, promotes the effective functioning of the organizations" (Organ, 1988). Employee helping behaviors constitute a significant dimension of OCB, encompassing actions directed toward colleagues and the organization itself (Deckop et al., 2003). This includes aiding colleagues with their tasks, sharing knowledge, and actively participating in organizational initiatives (George and Jones, 2014). Enhancing employee helping behaviors is critical in hospitality settings, where service delivery relies heavily on real-time coordination, and mutual support among frontline employees. Such discretionary assistance enables teams to respond effectively to fluctuating customer demands (Zhao and Guo, 2019).

Employees with a sense of calling often foster a deeper connection with an organization as their work is likely to align closely with their personal values and occupational goals (Wrzesniewski et al., 1997; Zouly and Ming, 2024). This motivates employees to go beyond their

formal job requirements to support their colleagues and contribute to the organization's success. Self-determination theory suggests that individuals have intrinsic motivation when they find a sense of purpose and fulfillment in their work (Deci et al., 2017). If a person perceives their career to be a "calling", they are likely to experience higher levels of intrinsic motivation, which is closely associated with OCB (Kurniawan et al., 2023). This motivation can translate into pro-social behaviors, including helping colleagues and contributing to the success of the organization (Lee, 2016). Prior research has shown that career calling plays an important role in shaping employees' vocational outcomes, including career satisfaction and adaptability (Douglass and Duffy, 2015; Lee, 2016), but its impact on hospitality employees' proactive helping behavior has been less examined (Park et al., 2024). An investigation of this impact, however, is particularly salient in hospitality's service-oriented and relationally intensive settings, where employees' motivation and engagement directly influence service interaction quality and organizational reputations (McManus et al., 2025). By encouraging employees to view their work as meaningful and purposeful, organizations can enhance intrinsic motivation and foster prosocial behaviors that support collective functioning. Therefore, the following hypotheses are proposed:

H1a. : Career calling is positively related to helping behaviors toward colleagues.

H1b. : Career calling is positively related to helping behaviors toward the organization.

2.2. The mediating role of job embeddedness

Given the demanding work conditions and high turnover rates that characterize hospitality settings, many employees may not develop strong connections to their teams or organizations (Kang et al., 2021). It is therefore unsurprising to observe that some hospitality workers limit their contributions strictly to formal job requirements (Kurniawan et al., 2023). Considering that helping behaviors toward colleagues and the organization are critical for maintaining operational efficiency (Park et al., 2024), fostering employees' embeddedness and integration into the workplace becomes essential. Employees who feel deeply connected to their organization and coworkers are more likely to assist others, safeguard organizational interests, and contribute to a positive service climate (Cheng, 2024). Job embeddedness captures this sense of connection and integration.

It also refers to the extent to which employees are deeply integrated into their job and organizational context (Cheng, 2024; Mitchell et al., 2001). Conceptually, it is described as a multidimensional construct consisting of fit, links, and sacrifice (Mitchell et al., 2001). Fit denotes the perceived compatibility between individual values and organizational culture. Links capture formal and informal connections with colleagues and the organization. Sacrifice reflects the perceived costs associated with leaving the organization. While job embeddedness was originally conceptualized as a multidimensional construct (Mitchell et al., 2001), it has been treated as global measure that captures employees' overall psychological sense of embeddedness (Crossley et al., 2007). Moreover, job embeddedness encompasses both organizational (on-the-job) and community (off-the-job) dimensions, with the organizational component being especially relevant in hospitality settings, where helping behavior predominantly occurs within workplace (Park et al., 2021). Consistent with this perspective, and in line with prior mediation-focused research in hospitality and applied psychology (e.g., Afsar et al., 2018), the present study conceptualizes job embeddedness as a work-related embeddedness experience.

Although job embeddedness has received growing attention in hospitality research, Arici et al.'s (2023) recent review indicates that prior studies have largely focused on its role in predicting retention, turnover, and other attitudinal outcomes (Afsar et al., 2018; Chen et al., 2026). Much less attention has been devoted to understanding the motivational

origins (Soltani Nejad et al., 2025), and in particular, how vocational identity-based motivations such as career calling, can foster employees' embeddedness in an organization. In addition, the role of job embeddedness in translating such motivations into discretionary helping behaviors in service contexts, remains underexplored.

Career construction theory posits that individuals actively construct their careers by integrating vocational experiences into a coherent and meaningful life narrative, through which vocational identities emerge and guide work behavior (Savickas, 2002). Central to this perspective is the idea that individuals seek work environments that allow them to enact and sustain these vocational identities. Within this framework, career calling represents an identity-based motivational resource which reflects a deeply internalized sense of purpose toward one's career (Dik and Duffy, 2009). When employees perceive their work as a calling, they are motivated to maintain work contexts that reinforce and sustain this vocational identity (Ghosh et al., 2023; Savickas, 2002). In organizational settings, job embeddedness reflects the structural and relational anchoring of this constructed career identity within the workplace, capturing the extent to which employees develop strong professional relationships with coworkers, perceive alignment between their vocational values and organizational values, and recognize the career-related sacrifices associated with leaving (Mitchell et al., 2001).

Through these connections, employees become more deeply embedded in the organization, strengthening their sense of belonging and responsibility, which in turn encourages discretionary behaviors such as helping coworkers (Ampofo and Karatepe, 2022). Indeed, in hospitality settings where teamwork and service coordination are essential, employees who feel more embedded in their organization may be more inclined to support coworkers and contribute beyond formal role requirements (Ampofo and Karatepe, 2022). Prior research provides initial evidence that job embeddedness is associated with proactive work behavior (Park et al., 2021). However, despite these insights, limited attention has been devoted to understanding job embeddedness as a psychological mechanism through which identity-based motivations translate into helping behaviors. Grounded in career construction theory, the present study proposes that:

H2a. Job embeddedness mediates the relationship between career calling and helping behaviors toward colleagues.

H2b. Job embeddedness mediates the relationship between career calling and helping behaviors toward the organization.

2.3. The moderating role of ambition

As a personality-based construct, ambition refers to the persistent and compelling desire for personal and professional success, typically manifesting as a strong achievement orientation and motivation for upward mobility (Judge and Kammeyer-Mueller, 2012). Ambition shapes how individuals pursue career opportunities, interpret workplace experiences, and regulate their behavioral investment (Bui et al., 2021). Despite its relevance to career development, ambition remains an emerging and relatively underexamined construct in the literature (Hirschi and Spurk, 2021). Existing research has primarily focused on its direct effects on outcomes such as career attainment, commitment, and task performance (Hirschi and Spurk, 2021; Otto et al., 2017; Zhu et al., 2026). Far less attention has been devoted to understanding how ambition influences the way employees translate workplace experiences into discretionary behaviors. In hospitality settings, where service work is highly visible and career progression often depends on demonstrating competence through everyday interactions (Testa and Sipe, 2012), ambition may play an important role in shaping how employees invest effort in discretionary workplace behaviors.

According to personality-job fit theory (Kristof, 1996), employees may respond differently to the same work conditions depending on how their dispositional orientations (e.g., personality traits) align with these conditions. Where compatibility exists, the work environment becomes

more motivationally meaningful, increasing the likelihood that employees invest effort in behaviors consistent with their personal tendencies (Sun and Yoon, 2022). One important workplace condition concerns the extent to which employees feel embedded in their organization. Job embeddedness reflects employees' overall sense of connection and integration within the organization, often accompanied by stable relationships, accumulated knowledge of the organization, and continuity in their work environment (Mitchell et al., 2001). These conditions place employees in a position where they are more familiar with organizational processes and more engaged in ongoing work interactions, thereby creating a context in which discretionary contributions such as helping behavior can occur.

However, employees may differ in how they utilize this embedded position. For highly ambitious individuals, feeling embedded in the organization places them within a relational work context where their everyday behaviors are more visible to coworkers and supervisors. Because ambitious employees are motivated to gain recognition, enhance their reputation, and advance their careers (Hirschi and Spurk, 2021), they may be particularly inclined to engage in behaviors that signal competence and initiative. In hospitality settings, where service work is highly interdependent and employee contributions are socially observable, helping behaviors may be interpreted as demonstrations of competence, initiative, and leadership potential (Testa and Sipe, 2012). As a result, ambitious employees may be more likely to translate their embeddedness into helping behaviors that enhance their professional reputation and career prospects. By contrast, employees lower in ambition may experience embeddedness primarily as a sense of attachment and stability within the organization. Although they may remain strongly connected to their organization, any sense of embeddedness may carry weaker implications for discretionary behavioral investment. Accordingly, ambition is expected to strengthen the positive relationship between job embeddedness and helping behavior.

Ambition may also introduce a more complex dynamic—while it can reflect achievement striving and upward mobility motivation—it can also involve a degree of self-focused goal pursuit (Hirschi and Spurk, 2021). Highly ambitious employees may become more strategic in allocating their time and energy, prioritizing activities that visibly enhance their individual performance and advancement prospects. Research on competitive orientations suggests that in achievement-focused contexts, individuals may conserve resources for tasks that directly contribute to personal success, rather than invest in behaviors where the returns are less immediate, or less individually attributable (Černe et al., 2014; O'Reilly and Pfeffer, 2025). Helping behaviors, particularly those directed toward coworkers, may sometimes be perceived as costly if they do not clearly translate into individual performance gains. Studies on competitive psychological climates show that when personal differentiation and performance comparisons are salient, employees are less inclined to engage in discretionary helping behaviors that do not directly benefit their own evaluations (Černe et al., 2014). In this way, ambition could potentially attenuate the positive relationship between job embeddedness and helping behavior.

Taken together, while personality-job fit theory suggests that ambition strengthens the behavioral expression of embeddedness, alternative perspectives on competitive motivation and strategic resource allocation suggest a potential countervailing or weakening effect. Accordingly, ambition may either amplify or, under certain circumstances, attenuate the effect of job embeddedness on helping behavior. Therefore propose the following competing hypotheses are proposed:

H3a. Ambition positively moderates the indirect effect of career calling on helping behavior (toward colleagues and toward the organization) through job embeddedness, such that the indirect effect is stronger when ambition is high.

H3b. Ambition negatively moderates the indirect effect of career calling on helping behavior (toward colleagues and toward the

organization) through job embeddedness, such that the indirect effect is weaker when ambition is high.

Based on the literature review, the research framework is presented below (see Fig. 1).

3. Methodology

3.1. Participants and data collection procedures

Data were collected from hospitality employees working in the central region of China. Researchers and research assistants visited various hotels (small to mid-sized and upscale) and invited hospitality workers and their supervisors to participate in the study. Consistent with previous research (Hai and Park, 2024), the study broadened participation beyond a single or limited number of hospitality establishments to ensure a more diverse sample, thereby strengthening the generalizability of the findings. Participants were informed that their involvement was entirely voluntary and that their responses would not be shared with anyone except the research team. Individuals who expressed interest in were required to complete a consent form, providing their signature and contact details, including WeChat IDs; WeChat is a widely used instant messaging app in China. Afterward, they received an anonymous survey link through the contact information they had provided. In line with Bhawna et al. (2023), participants were required to have at least one year's experience in the hospitality industry to ensure they possessed a basic understanding of a hospitality career. A power analysis was conducted using G*Power (Faul et al., 2009), a widely recommended tool for evaluating statistical power in behavioral and social science research. Based on a model incorporating three independent and six control variables, assuming a medium effect size and a desired statistical power of .95, the analysis indicated a minimum required sample size of 176, which the final matched sample of 199 employee-supervisor dyads exceeded.

To mitigate common method bias (see Podsakoff, 2012; Duffy et al., 2022), data were collected in three waves, with a six-month interval between each wave, incorporating multiple sources, including employees and their supervisors. An online survey was used for each wave, and to protect privacy, participants were only required to provide the last four digits of their phone numbers to match their responses over time. At Time 1 (baseline), 320 employees completed a questionnaire assessing career calling, ambition, and demographic characteristics. Six months later, the same participants were invited to complete a follow-up survey measuring job embeddedness, to which, 221 employees responded (Time 2). To minimize participant attrition, a small incentive of 8 RMB (approximately USD \$1.10) was provided for each completed survey. Another six months later (i.e., 12 months after Time 1), these 221 employees were asked to forward an online survey invitation to their immediate supervisors, who were invited to rate the employees' helping behaviors (Time 3). To ensure accurate matching of responses, supervisors were asked to provide the last four digits of their own phone numbers along with the last four digits of the employees they evaluated. After matching the data, 199 employees had their helping behaviors rated by their supervisors, with 171 supervisors participating in the survey.

Employees from small- to medium-scale hotels (fewer than 100 employees) made up 29% of the sample, with 17% working in hotels with fewer than 50 employees and 12% in those with 50–99 employees. In contrast, 71% were employed in large-scale hotels (100 or more employees). The sample primarily consisted of early- to mid-career employees, with an average age of 40 years ($SD = 10.41$). Women comprised 66% of the sample. In terms of marital status, 15% were single, with the majority 85% either married or in a relationship. Respondents reported a mean of three dependents (e.g., parents, children; $SD = 1.49$). On average, employees had been with their organization for seven years ($SD = 4.28$), with 72% having a tenure of 2–10 years, while

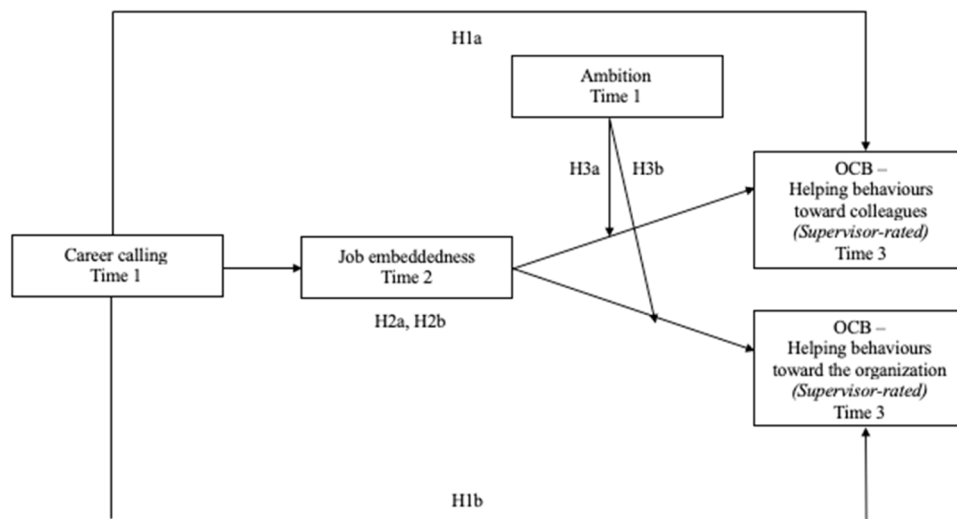


Fig. 1. Research model.

7% had been employed for less than two years. In terms of educational background, 21% had no formal qualifications, 37% had completed high school, 34% held a certificate or diploma, and 8% possessed a bachelor's degree.

The supervisors were slightly older, with an average age of 42 years ($SD = 10.61$), and over 55% were aged over 40 years. The majority (58%) were female. On average, they had been with their organization for eight years ($SD = 4.75$), with approximately 35% having a tenure exceeding ten years. Regarding educational background, 55% had no qualifications beyond high school, 30% held a certificate or diploma, 14% had a bachelor's degree, and one supervisor had a postgraduate degree.

3.2. Measures

Two bilingual researchers translated the questionnaire into Chinese using Brislin's (1976) translation-back-translation method. To refine the wording, a pilot test was conducted with 20 Chinese hospitality employees.

The five-item scale by Hirschi and Spurk (2021) was used to measure *ambition* at Time 1. Participants responded on a 7-point scale, ranging from 1 (strongly disagree) to 7 (strongly agree), e.g., "For me, it is very important to accomplish great things." This scale has been used in prior studies to assess employee ambition (Mukherjee and Datta, 2024; Sun et al., 2024) and has demonstrated validity in the Chinese context, with $\alpha = .88$ reported by Kong et al. (2024). The Cronbach's alpha coefficient for this measure was 0.86 in the present study.

Career calling was examined using the 12-item measure adopted from Duffy et al. (2011) at Time 1. Respondents rated the extent to which they agreed with the statements (e.g., "My career is an important part of my life's meaning") on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). This measure has been widely used to examine employees' career-related calling, with previous research confirming its reliability ($\alpha = 0.91$, Duffy et al., 2015; $\alpha = 0.85$, Ehrhardt and Ensher, 2021). In the present study, this measure yielded a Cronbach's alpha of 0.78.

Job embeddedness was assessed at Time 2 using the seven-item global job embeddedness scale developed by Crossley et al. (2007) (e.g., "I am tightly connected to this organization"). This scale conceptualizes job embeddedness as a reflective construct capturing employees' overall psychological attachment to their jobs and organizations, and has been widely used in applied psychology research, particularly in mediation-focused and field-based studies (Afsar et al., 2018). Responses were recorded on a 7-point Likert scale ranging from 1 (strongly

disagree) to 7 (strongly agree). The internal consistency of the scale in the present study was high (Cronbach's $\alpha = .96$), which is consistent with reliability estimates reported in prior research using this measure (e.g., Marasi et al., 2016; $\alpha = .94$). Given the multi-wave design of the study, and the fast-paced hospitality context compared to the composite measure, the global measure was considered appropriate for capturing job embeddedness as an overarching psychological mechanism, while minimizing respondent burden.

Helping behaviors toward colleagues were assessed at Time 3 using the four-item scale adopted from Farh et al. (1997). A sample item included: "This employee is willing to cover work assignments for colleagues when needed." Supervisors rated the items on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach's alpha for this scale was 0.95.

Helping behaviors toward the organization were assessed at Time 3 using the five-item measure adopted from Liang et al. (2012). A sample item included: "This employee proactively develops and makes suggestions for issues that may influence the organization." Supervisors rated the items on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach's alpha for this scale was 0.96.

To verify that helping behaviors toward colleagues and helping behaviors toward the organization represented distinct constructs, a confirmatory factor analysis (CFA) was conducted to compare a one-factor model with a two-factor model. The results indicated that the two-factor model provided a significantly better fit to the data ($\chi^2(26) = 90.14$, SRMR = 0.02, CFI = 0.97, TLI = 0.96) and demonstrated an improved model fit compared to the one-factor model ($\Delta\chi^2(1) = 427.54$, $p < 0.001$). These findings supported the discriminant validity of the two constructs.

Consistent with previous research on service employees' extra-role behaviors (e.g., Aguiar-Quintana et al., 2020; Wang et al., 2017), demographic variables such as age, gender, tenure, marital status, and number of dependents (e.g., parents and children) were used as control variables. Additionally, previous meta-analytic reviews have demonstrated that family support significantly impacts vocational commitment (Zhu et al., 2020). Consequently, this study also accounted for the potential effect of employees' perceived family support. Perceived family support ($\alpha = 0.93$) was measured using the scale developed by Boyar et al. (2014). A sample item included: "If I have to work late, I can count on someone in my family to take care of everything at home."

4. Results

4.1. Nonresponse bias

Nonresponse bias was assessed using the approach outlined by Armstrong and Overton (1977), which involved comparing the earliest 40% of survey respondents with the latest 60%, as the latter were considered reasonable proxies for nonrespondents (Ali et al., 2020). The chi-square test results showed no significant differences in gender distribution ($\chi^2 = 0.11, p = 0.74$) and marital status ($\chi^2 = 0.01, p = 0.98$) between the two groups. Similarly, two-tailed *t*-tests revealed no significant differences in age ($t = -0.34, p = 0.73$), tenure ($t = -0.10, p = 0.92$), number of dependents ($t = -1.46, p = 0.15$), perceived family support ($t = -1.20, p = 0.23$), career calling ($t = -1.52, p = 0.12$), ambition ($t = -0.84, p = 0.40$), job embeddedness ($t = 0.06, p = 0.94$), helping behaviors toward colleagues ($t = -0.68, p = 0.49$), and helping behaviors toward the organization ($t = -0.74, p = 0.45$). These findings suggested that nonresponse bias was unlikely to be a concern in this study.

4.2. Common method variance

To mitigate common method variance (CMV), best practices recommended by Podsakoff et al. (2012) were followed. These included ensuring respondent anonymity and collecting multi-wave data from multiple sources (i.e., employee and supervisor surveys). Additionally, Harman’s one-factor test (Harman, 1976) indicated that one factor accounted for only 39% of the total variance, which fell below the 50% threshold for being considered problematic. Furthermore, the model that included the latent common method factor (CMF) demonstrated a poorer fit compared to the research model (Research model: $\chi^2/df = 1.70, RMSEA = 0.06, CFI = 0.96, TLI = 0.95$; Model with latent CMF: $\chi^2/df = 2.03, RMSEA = 0.07, CFI = 0.93, TLI = 0.92$).

4.3. Measurement model and descriptive statistics

Before testing the hypotheses, a confirmatory factor analysis (CFA) was conducted using Mplus 8.3. As shown in Table 1, the proposed five-factor model exhibited a better fit to the data ($\chi^2/df = 1.70, RMSEA = 0.06, SRMR = 0.04, CFI = 0.96, TLI = 0.95$) compared to the four-factor model, and significantly outperformed the three-, two-, and one-factor models. Table 2 shows that all constructs had composite reliability values exceeding 0.8, confirming the reliability of the measures. Moreover, the square root of average variance extracted (AVE) for each construct exceeded its correlations with other constructs, further supporting the validity of the constructs.

4.4. Hypothesis testing

Hierarchical multiple regression analysis, along with the Monte Carlo method, was conducted to test the hypotheses. In Models 2 and 3 of Table 3, after controlling for age, gender, tenure, marital status, number of dependents and perceived family support, career calling was positively related to helping behaviors toward colleagues ($B = 0.22, SE = 0.07, p < 0.001$) and helping behaviors toward the organization ($B = 0.26, SE = 0.09, p < 0.01$). These findings provided support for H1a and H1b.

Besides, as presented in Model 1 of Table 3, career calling was positively related to job embeddedness ($B = 0.61, SE = 0.07, p < 0.001$). Additionally, Models 4 and 5 of Table 3 indicated that job embeddedness was significantly related to helping behaviors toward colleagues ($B = 0.16, SE = 0.07, p < 0.05$) and helping behaviors toward the organization ($B = 0.26, SE = 0.09, p < 0.01$). However, the direct effect of career calling on helping behaviors toward colleagues ($B = 0.12, SE = 0.08, p > 0.05$) and toward the organization ($B = 0.10, SE = 0.10, p > 0.05$) was not significant.

To further examine the potential mediation effects, the Monte Carlo method (Bauer et al., 2006) was applied. As shown in Table 4, with 20,000 replications, the 95% confidence interval (CI) for the mediation effect of job embeddedness in the relationship between career calling and helping behaviors toward colleagues was [0.0307, 0.1687], and for the relationship between career calling and helping behaviors toward the organization was [0.0601, 0.2537]. Since both confidence intervals excluded zero, the mediation effects were statistically significant, supporting H2a and H2b.

According to Hypothesis 3, ambition would moderate the indirect effect of career calling on both helping behaviors toward colleagues and helping behaviors toward the organization via job embeddedness. First, a simple slope test was performed to examine the moderating effect of ambition on the relationships between job embeddedness and the two types of helping behaviors. The findings demonstrated that the effects of the interaction term on helping behaviors toward colleagues ($B = 0.15, p < 0.01$) and helping behaviors toward the organization ($B = 0.23, p < 0.001$) were significant. Furthermore, as shown in Fig. 2 and Fig. 3, job embeddedness exerted a stronger effect on the two types of helping behaviors when ambition was high (+1 SD) (toward colleagues: $B = 0.36, t = 5.48, p < 0.001$; toward the organization: $B = 0.54, t = 6.06, p < 0.001$) than when ambition was low (-1 SD) (toward colleagues: $B = 0.12, t = 1.89, p > 0.05$; toward the organization: $B = 0.18, t = 2.07, p > 0.05$).

and helping behaviors toward colleagues.
and helping behaviors toward the organization.

To further assess the significance of the moderated mediation effect and the stability of the parameter estimates at the observed sample size, a Monte Carlo simulation was conducted with 20,000 replications, following established procedures (Bauer et al., 2006; Muthén and Muthén, 2002). Table 4 shows that, with 20,000 replications, career calling had an indirect effect on helping behaviors toward colleagues (through job embeddedness) for individuals with higher ambition (mean + SD). However, this indirect effect was not significant for individuals with lower ambition (mean - SD). The strength of these effects differed significantly ($B = 0.1315, SE = 0.0496, 95\% CI [0.0343, 0.2287]$). Moreover, Table 4 also shows that career calling had an indirect effect on helping behaviors toward the organization (through job embeddedness) for individuals with higher ambition (mean + SD), while the effect was not significant for those with lower ambition (mean - SD). The strength of these effects differed significantly ($B = 0.2097, SE = 0.0696, 95\% CI [0.0733, 0.3461]$). Hence, H3a was supported, and H3b was

Table 1
Confirmatory factor analysis.

Model	No. of factors	χ^2/df	$\Delta\chi^2$	CFI	TLI	RMSEA	SRMR
Baseline model	5 factors: Ambition, Career calling, JE, HBC and HBO	1.70	N/A	0.96	0.95	0.06	0.04
Alternative 1	4 factors: Ambition, Career calling, JE, (HBC+ HBO)	2.66	477	0.89	0.88	0.09	0.06
Alternative 2	3 factors: Ambition, Career calling, (JE + HBC+ HBO)	5.64	1940	0.69	0.67	0.15	0.14
Alternative 3	2 factors: Ambition, (Career calling + JE+ HBC+ HBO)	9.69	3969	0.42	0.38	0.21	0.16
Alternative 4	1 factor: (Ambition + Career calling + JE+ HBC+ HBO)	10.44	4352	0.37	0.33	0.22	0.17

Note. JE = Job embeddedness; HBC = Helping behaviors toward colleagues; HBO = Helping behaviors toward the organization; d.f. = Degrees of freedom; CFI = Comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root mean square error of approximation; SRMR = Standardized root mean square residual.

Table 2
Descriptive statistics and bivariate correlations.

	M	SD	CR	AVE	1	2	3	4	5	6	7	8	9	10	11
1. Age	40.09	10.41	-	-	1										
2. Gender ^a	-	-	-	-	-0.12	1									
3. Tenure	7.24	4.28	-	-	0.35**	-0.07	1								
4. Marital status ^b	-	-	-	-	0.26**	0.03	0.21**	1							
5. Number of dependents	3.34	1.49	-	-	-0.09	0.11	0.05	0.26**	1						
6. Family support	5.65	0.98	-	-	0.03	-0.01	-0.02	-0.05	-0.07	1					
7. Ambition at T1	5.77	0.78	0.85	0.60	-0.02	-0.10	-0.03	0.01	-0.03	0.36**	1				
8. Career calling at T1	5.24	0.92	0.83	0.62	0.02	-0.06	-0.06	-0.01	-0.07	0.47**	0.48**	1			
9. JE at T2	5.23	1.06	0.96	0.80	0.18*	-0.01	0.08	0.04	-0.06	0.40**	0.40**	0.59**	1		
10. HBC at T3	5.90	0.79	0.95	0.82	0.01	0.06	-0.01	-0.06	-0.08	0.21**	0.13	0.29**	0.32**	1	
11. HBO at T3	5.40	1.09	0.93	0.85	0.02	0.02	0.14*	0.01	-0.03	0.31**	0.22**	0.31**	0.38**	0.60**	1

Note. N = 199. JE = Job embeddedness; HBC = Helping behaviors toward colleagues; HBO = Helping behaviors toward the organization; CR= Composite reliability; AVE=Average variance extracted.

^a Dummy-coded: 0 = male, 1 = female.

^b Dummy-coded: 0 = single, 1 = married/in a relationship.

* p < .05.

** p < .01.

rejected.

4.5. Robustness analysis

First, the analysis was re-run without including control variables, and all hypotheses remained supported. Second, the mediating effects were reassessed using Structural Equation Modeling (SEM) in Mplus 8.3, incorporating both dependent variables into a single model. The hypothesized model fit the data well ($\chi^2/df = 1.60$, RMSEA = 0.06, CFI = 0.96, TLI = 0.95). Monte Carlo simulations with 20,000 iterations were conducted to further assess the stability of the parameter estimates given the model complexity and sample size. The mediation effects of job embeddedness remained significant for helping behaviors toward colleagues (Estimate = 0.1009, 95% CI [0.0350, 0.1668]) and helping behaviors toward the organization (Estimate = 0.1955, 95% CI [0.1142, 0.2768]).

A moderated mediation test was then conducted using the latent moderated structural equation (LMS) method with the Mplus syntax “XWITH” (Maslowsky et al., 2014). The addition of the moderation effect significantly improved model fit ($\Delta\chi^2 = 412.86$, $\Delta df = 20$, $p < 0.001$). The moderated mediation effects also remained significant, with stronger indirect effects observed among employees with higher ambition levels for both helping behaviors toward colleagues (Estimate = 0.1746, 95% CI [0.0791, 0.2701]) and helping behaviors toward the organization (Estimate = 0.2815, 95% CI [0.1431, 0.4199]). Overall, the conclusions drawn from the primary analyses were corroborated across SEM and LMS approaches, supporting the robustness of the findings despite the model complexity and sample size.

5. Discussion

Service performance relies heavily on employees’ dedication to their profession and their organization (Zhao and Guo, 2019). This study, employing a multi-source and multi-wave research design, is among the first to examine the relationships between career calling, job embeddedness, ambition and helping behaviors. Grounded in career construction theory (Savickas, 2002), this study examined whether job embeddedness would serve as a mediating mechanism linking career calling to helping behaviors directed at colleagues and the organization, while also assessing whether ambition would moderate this mediation based on personality-job fit theory (Kristof, 1996). The mediation analysis revealed that job embeddedness accounted for the connection between career calling and helping behaviors. In other words, perceiving one’s career as a calling can serve as a form of intrinsic motivation, fostering greater job commitment, strengthening team cohesion and benefiting organizational performance. Moreover,

ambition was identified as a critical boundary condition, as career calling was only associated with helping behaviors through job embeddedness among employees with high ambition. These findings offer valuable insights for both researchers and practitioners, as discussed in the following sections.

5.1. Theoretical implications

First, this study extends career calling research beyond traditional attitudinal and well-being outcomes by demonstrating its implications for hospitality employees’ discretionary helping behaviors. While prior research has shown that various individual differences can shape employees’ OCB (Doan et al., 2021; Yan et al., 2024), the role of vocational identity-based motivations has received limited attention. In particular, despite career calling’s inherently prosocial orientation, little research has examined whether it translates into the discretionary behavior of hospitality employees (Park et al., 2024). Responding to this call, the present study demonstrates that career calling is associated with employees’ helping behaviors toward both colleagues and the organization. In doing so, it extends prior career calling research that has largely focused on career satisfaction and turnover management (Han and Hwang, 2021; Lee, 2016; Lee et al., 2022). By linking career calling to helping behaviors in service work contexts, this study therefore broadens the theoretical scope of the career calling literature beyond its traditional focus on individual career development.

Second, drawing on career construction theory (Savickas, 2002), this study identifies job embeddedness as a key mechanism through which hospitality employees’ vocational identities become enacted within organizational contexts. The findings suggest that when employees experience hospitality work (e.g., caring for others) as a calling, their vocational identities become more closely aligned with the service mission and interpersonal ethos of their organizations. This alignment may foster a stronger sense of fit and connection with the workplace, reinforcing employees’ integration into the service-oriented social environment (Taylor and Lefebvre, 2022). In this way, career calling not only shapes how individuals interpret the meaning of their work, but also how they become anchored within organizations characterized by collaboration and mutual support. The identification of job embeddedness as the mechanism through which vocational identities are enacted in organizational life shifts attention from career calling merely as an individual, meaning-oriented construct (e.g., Lee et al., 2022) to its implications for employees’ organizational rootedness and prosocial workplace behaviors. Furthermore, this research contributes to job embeddedness literature by expanding understanding of its motivational origins. Although job embeddedness has received growing interest in hospitality research, prior studies have primarily focused on job

Table 3
Unstandardized estimates (standard error) of the moderated mediation analysis.

Control variables	JE		HBC		HBO		HBC		HBO		HBC		HBO	
	Model 1	SE	Model 2	SE	Model 3	SE	Model 4	SE	Model 5	SE	Model 6	SE	Model 7	SE
Age	0.02*	0.01	0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	0.01	0.01	-0.01	0.01
Gender ^a	0.10	0.13	0.16	0.12	0.12	0.15	0.15	0.12	0.09	0.15	0.15	0.11	0.11	0.15
Tenure	0.01	0.01	0.01	0.01	0.01*	0.01	-0.01	0.01	0.01*	0.01	0.01	0.01	0.01*	0.01
Marital status ^b	-0.01	0.18	-0.13	0.16	0.02	0.22	-0.13	0.16	0.02	0.16	-0.06	0.16	0.12	0.21
Number of dependents	-0.01	0.04	-0.03	0.04	-0.02	0.05	-0.03	0.04	-0.01	0.05	-0.03	0.04	-0.01	0.05
Family support	0.16*	0.07	0.07	0.06	0.25**	0.08	0.04	0.06	0.21*	0.08	0.04	0.06	0.18*	0.08
Predictor														
Career calling	0.61***	0.07	0.22***	0.07	0.26**	0.09	0.12	0.08	0.10	0.10	0.11	0.08	0.06	0.10
Mediator														
JE							0.16*	0.07	0.26**	0.09	0.18**	0.07	0.27**	0.09
Moderator														
Ambition														
JE × Ambition	0.41		0.10		0.17		0.14		0.20		0.02		0.16	0.11
R ²	0.38		0.08		0.14		0.10		0.17		0.14**		0.22***	0.06
Adjusted R ²	18.66***		3.26**		5.45***		3.72***		6.09***		3.92***		6.35***	
F Value														

Note. N = 199. JE = Job embeddedness; HBC = Helping behaviors toward colleagues; HBO = Helping behaviors toward the organization.

a Dummy-coded: 0 = male, 1 = female.

b Dummy-coded: 0 = single, 1 = married/in a relationship.

* p < .05.

** p < .01.

*** p < .001.

Table 4

Conditional indirect effects of the moderated mediation analysis.

	Estimate	SE	95% CI ^a
Indirect effect			
Career calling → JE → HBC	0.0997	0.0352	[0.0307, 0.1687]
Career calling → JE → HBO	0.1569	0.0494	[0.0601, 0.2537]
Conditional indirect effect			
Career calling → JE → HBC			
Lower ambition (mean - SD)	0.0452	0.0404	[-0.0340, 0.1244]
Higher ambition (mean + SD)	0.1767	0.0465	[0.0856, 0.2678]
Difference	0.1315	0.0496	[0.0343, 0.2287]
Career calling → JE → HBO			
Lower ambition (mean - SD)	0.0599	0.0555	[-0.0489, 0.1687]
Higher ambition (mean + SD)	0.2695	0.0658	[0.1405, 0.3985]
Difference	0.2097	0.0696	[0.0733, 0.3461]

Note. N = 199. JE = Job embeddedness; HBC = Helping behaviors toward colleagues; HBO = Helping behaviors toward the organization.

Control variables: age, gender, tenure, marital status, number of dependents and family support.

^aCI = Confidence interval. 95% CI were calculated using the Monte Carlo method with 20,000 replications.

and organizational characteristics (Majumdar and Dasgupta, 2024). Considerably less attention has been devoted to identity-based motivations shaping employees' embeddedness within organizations (Soltani Nejad et al., 2025). By demonstrating that career calling can foster employees' embeddedness and encourage helping behaviors, this study highlights the role of vocational identity in shaping both the development and behavioral implications of job embeddedness.

Third, this study identifies ambition as an important boundary condition shaping when and for whom the indirect effect of career calling on helping behaviors through job embeddedness becomes stronger. Addressing recent calls to examine the boundary conditions of career calling and job embeddedness (Lee et al., 2022; Peltokorpi and Sekiguchi, 2023), the findings suggest that ambition amplifies the behavioral expression of calling-informed embeddedness. Although ambition has often been conceptualized as a double-edged trait that can motivate high performance while also encouraging self-interested competition, the present findings suggest that, when job embeddedness is rooted in career calling, ambition operates in a predominantly facilitative manner. Because career calling typically incorporates both personal meaning and a concern for contributing beyond the self (Duffy et al., 2011), the embeddedness it generates is more likely to be grounded in shared values and a sense of responsibility toward others. When such calling-informed embeddedness is established, ambition may provide additional motivational energy that encourages employees to express their attachment through visible, discretionary helping behaviors rather than mere job persistence (Hirschi and Spurk, 2021).

From a person-job fit and career construction perspective, ambitious employees who feel embedded through their sense of calling may view helping coworkers and supporting organizational functioning as a natural way to enact both their purpose and career growth. This dynamic is salient in hospitality settings, where service quality, teamwork, and interpersonal coordination are highly observable and socially valued (Testa and Sipe, 2012). Under these conditions, ambition is less likely to manifest as zero-sum competition, and more likely to amplify the behavioral expression of calling-informed job embeddedness. By contrast, the darker side of ambition may be more likely to emerge in contexts where job embeddedness is not anchored in career calling, or where organizational systems emphasize individualized performance metrics and weak relational norms. Accordingly, future research should investigate situations where ambition undermines, rather than strengthens, the translation of calling-informed job embeddedness into helping behaviors. This could be achieved by jointly examining individual orientations (e.g., Machiavellianism; Gürlek, 2021), alongside contextual features like reward structures and competitive climates.

Finally, by employing a one-year, multi-wave, multi-source research

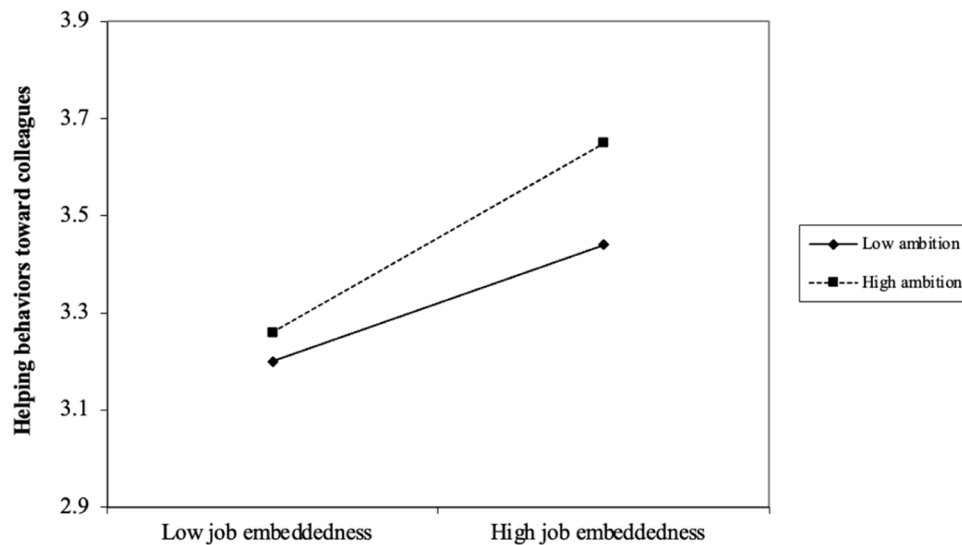


Fig. 2. The moderating role of ambition on the relationship between job embeddedness.

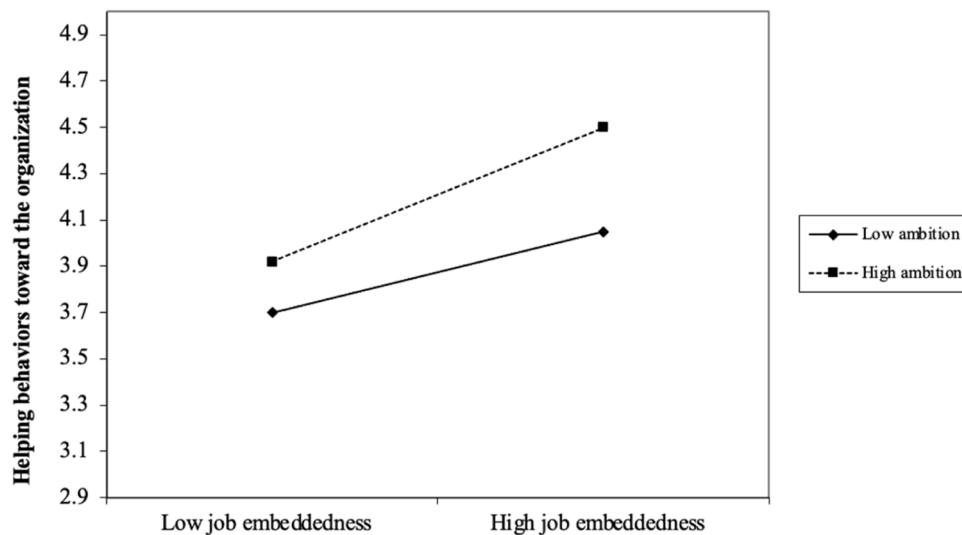


Fig. 3. The moderating role of ambition on the relationship between job embeddedness.

design, this study more rigorously examines how career calling translates into job embeddedness and subsequent helping behaviors over time. The influence of vocational identities on workplace behavior often unfolds gradually as employees translate their calling into embeddedness and subsequent action. Therefore, capturing these constructs across multiple time points allows for a more rigorous evaluation of this theorized process. In doing so, the study responds to calls for more longitudinal and multi-informant research in the career calling literature (Han and Hwang, 2021; Lee et al., 2016; Lee et al., 2022). Given that much of the existing research has relied on cross-sectional or single-source data (Duffy et al., 2022), the present design provides more robust evidence regarding how career calling relates to employees' discretionary helping behaviors while reducing concerns about common method bias.

5.2. Managerial implications

Beyond these theoretical contributions, our findings yield concrete managerial actions for hospitality organizations seeking to translate employees' career calling into observable helping behaviors. The findings suggest that career calling does not always translate into

discretionary helping behavior on its own. Therefore, managers should move beyond symbolic encouragement of purpose and develop everyday managerial practices that help employees integrate career calling into their daily work (Dalla Rosa et al., 2019). In practice, this may involve reinforcing prosocial role modeling and guided socialization—for example, pairing new hires with experienced staff who exemplify service excellence and collaborative conduct—thereby accelerating the internalization of service-oriented values. Managers can also incorporate structured career reflection into routine supervision (e.g., shift briefings or performance check-ins) by encouraging employees to connect specific service behaviors and skills with their longer-term career aspirations (Duffy et al., 2022). In addition, granting bounded discretion, such as inviting frontline employees to propose service improvements or lead micro-initiatives, can help translate personal meaning into concrete role engagement (Riasnugrahani et al., 2019). Taken together, these practices provide managers with actionable ways to operationalize career calling within daily work, enabling employees to express their sense of purpose through proactive contributions that support service delivery and team functioning.

The findings further indicate that career calling enhances employees' helping behaviors primarily by strengthening job embeddedness. This

suggests that managerial interventions should extend beyond fostering calling alone. At the supervisory level, job embeddedness can be enhanced through relational investment inspired by servant leadership principles that emphasize humility, genuine care, and attention to employees' needs (Ozturk et al., 2021). From a career construction perspective, such relational practices provide social resources that help convert employees' sense of calling into durable job embeddedness, thereby sustaining vocational meaning within the organization. In practice, supervisors may intentionally create off-work and semi-formal social spaces, such as monthly small-group dinners, post-shift coffee catch-ups, or informal celebrations following peak service periods. When supervisors participate in these activities as equals—listening, expressing appreciation, and minimizing hierarchical cues—such interactions signal respect and personal concern. These low-pressure settings strengthen employees' embeddedness in their roles and relationships, allowing the sense of calling that drew them to the work to remain anchored in everyday organizational life.

At the HR and organizational level, the key challenge is not how to activate career calling, but rather, how to sustain job embeddedness once calling-driven engagement is already present. Consistent with career construction theory's emphasis on resource accumulation and protection, HR policies should ensure that prolonged commitment is matched with employment resources that are difficult to replicate externally, such as internal mobility opportunities, organization-specific skill development, and tenure-linked benefits. Discretionary contributions should be formally recognized within appraisal and promotion systems—not as evidence of personal sacrifice—but as signals of sustainable organizational membership (Tian et al., 2016). At the same time, because calling-driven employees often invest substantial time and personal energy, HR systems should incorporate structural safeguards—including self-scheduling, limits on consecutive high-intensity shifts, and protected recovery periods—to prevent resource depletion (Shariq and Siddiqui, 2023). By embedding reciprocity and protection into HR architecture, organizations can stabilize job embeddedness as a durable mechanism that retains calling-driven motivation and channels it into continued support for coworkers and the organization.

The findings indicate that the indirect effect of career calling on helping behaviors through job embeddedness is contingent on employees' ambition. For employees with high ambition, job embeddedness is more likely to be enacted in proactive ways. These employees tend to project their calling into future-oriented career narratives, and to view their embeddedness as a platform for living out their calling while advancing their careers. Accordingly, organizations can strengthen this process by offering career-contingent opportunities that make discretionary contributions visible and meaningful—for example, by asking frontline staff to take a leadership role in synthesizing VIP guest feedback and helping coworkers implement targeted service upgrades for returning VIP customers—thereby supporting team service delivery and organizational performance while building professional credibility for future career development (Ghosh, 2023). Research suggests that teenage ambition positively correlates with higher salaries in adulthood (Ashby and Schoon, 2010), underscoring the importance of fostering career aspirations from an early stage. Such practices help ambitious employees see how enacting their calling through embedded participation and helping others, supports both personal career goals and organizational effectiveness.

In contrast, for employees with lower levels of ambition, career calling may still foster ties to the organization, but this attachment is less likely to translate into sustained extra-role contribution. In such cases, managers should focus on maintaining job embeddedness through role clarity, manageable workloads, and reliable support structures, while recognizing that embedded employees with lower ambition may prefer to express their commitment through in-role performance (Park et al., 2021). From a personality-job fit perspective, aligning expectations with employees' ambition levels helps ensure that career calling

contributes to organizational functioning without creating unrealistic expectations for discretionary helping. Overall, the findings highlight ambition as a key condition that shapes how career calling is translated into helping behaviors through job embeddedness, underscoring the value of differentiated management strategies, rather than a one-size-fits-all approaches.

Taken together, this study shifts attention from turnover management toward a broader career-based perspective on both retention and service contribution in the hospitality industry. Given the sector's persistent turnover challenges and strong reliance on frontline service performance, managers should move beyond reactive turnover management and adopt long-term strategies that strengthen job embeddedness; through this approach, career calling can translate into sustained organizational contribution and helping behaviors. To cultivate a stable and supportive workforce, hospitality organizations should align practices that operationalize career calling with relational mechanisms that anchor employees. Furthermore, HR systems must be designed to sustain this embeddedness while accounting for individual differences in ambition, ultimately driving service excellence.

5.3. Limitations and future research recommendations

First, the generalizability of the findings is constrained due to data collection being limited to one country, i.e., China. Cultural factors could moderate the impact of career calling on employee outcomes. In collectivist cultures, individuals may prioritize group harmony over personal career aspirations, potentially weakening the influence of career calling (Hofstede, 2011). This occurs because career decisions are also shaped by social expectations, familial obligations, and collective well-being rather than individual passion (Savickas, 2002).

In addition, although the present study focuses on the hospitality industry, caution is needed when generalizing the findings to other occupational contexts. The proposed relationships may be especially salient in hospitality settings, which are characterized by high interpersonal interaction, emotional labor, and strong service interdependence (Gu and Tang, 2025). Hospitality work often involves a "labor of love" centered on sustained personal care and service, requiring employees to invest their identities, emotions, and personal values in their work roles (Poulston, 2015). In such contexts, career calling may function as a particularly important identity-based resource that strengthens employees' job embeddedness and willingness to engage in discretionary helping behaviors (Wen et al., 2023). By contrast, in occupations characterized by lower interpersonal or emotional demands, such as highly standardized or machine-oriented work, career calling may operate differently or play a less central role in fostering helping behaviors. Future research could therefore adopt comparative or multi-industry designs to examine whether the relationships observed in the present study vary across different occupational contexts and levels of customer interaction.

Second, job embeddedness was operationalized using a global, reflective measure rather than the original multidimensional formulation comprising fit, links, and sacrifice. This decision reflects a deliberate trade-off. The original job embeddedness measure proposed by Mitchell et al. (2001) was conceptualized as a formative construct and involved 40 items, which poses challenges for psychometric evaluation in psychological research, and may be impractical in multi-wave field studies (Afsar et al., 2018). Accordingly, applied organizational research has increasingly adopted the global, reflective measure developed by Crossley et al. (2007), which captures employees' overall sense of being embedded while reducing respondent burden. Nonetheless, the use of a global measure also entails limitations. Specifically, it does not permit a fine-grained examination of how fit, links, and sacrifice may differentially relate to distinct forms of helping behavior, nor does it distinguish between work-related and non-work-related sources of embeddedness (see Clinton et al., 2012). Future research would therefore benefit from developing and validating multidimensional, hospitality

work-environment-sensitive reflective measures of job embeddedness to more precisely capture these mechanisms, allowing for more targeted managerial interventions.

Third, while this study examined job embeddedness as a key mechanism linking career calling to OCB, other mediating processes may exist. For example, psychological ownership, the feeling of personal investment and responsibility toward one's job, may also mediate this relationship (Dawkins et al., 2015). Employees who strongly identify with their calling may experience greater psychological ownership, reinforcing their commitment to both their role and the organization by fostering a sense of control and self-identity within the workplace (Park et al., 2021). Future research could integrate additional mediators, such as psychological ownership or identity-based motivation, to capture a more holistic understanding of the mechanisms underlying the relationship between career calling and discretionary workplace behavior.

Furthermore, the effects of career calling and ambition on workplace behaviors may be more complex or context-dependent than captured here. While ambition is generally seen as a driver of career success, it may also carry potential downsides that were not examined. Research suggests that highly ambitious employees may experience stronger overqualification perceptions and be more likely to develop voluntary turnover intentions (Hirschi and Spurk, 2021; Liu et al., 2022). Similarly, although career calling is often associated with positive motivational outcomes, prior research suggests that its effects may not always be uniformly beneficial across contexts. For example, perceiving a calling without opportunities to meaningfully enact it may contribute to frustration or reduced well-being, while excessively strong calling orientations may, under certain conditions, encourage overinvestment in work and excessive self-sacrifice (Duffy et al., 2016; Pitacho and Cordeiro, 2023). These possibilities suggest that the beneficial effects of career calling and ambition may depend on contextual and individual factors such as career advancement opportunities, workload conditions, and employees' personal value orientations. Future research could therefore examine potential curvilinear effects and broader boundary conditions to better understand when career calling and ambition contribute to sustainable engagement, rather than disengagement and withdrawal behaviors.

Lastly, although the time-lagged design allowed the theorized directional relationships to be tested across time, it was not sufficient to capture the dynamic and potentially reciprocal nature of career calling. Longitudinal evidence suggests that over time, career calling may change systematically, rather than remain stable (Dalla Rosa et al., 2019; Dobrow, 2012). For example, Dobrow's (2012) multi-wave study showed that individuals who were highly behaviorally involved and socially comfortable in a calling domain reported elevated calling early on, but subsequently experienced declines due to ongoing self-evaluation, social comparison, and recalibrated career expectations. From this perspective, the role of career calling in shaping job embeddedness and discretionary behaviors may vary across career stages; for instance, calling may play a more central role in motivating engagement and persistence early in one's career, whereas its influence may weaken or operate differently at later stages, as stability or role balance becomes more salient (see socioemotional selectivity theory; Carstensen et al., 1999). Moreover, these relationships may be reciprocal, such that job embeddedness and discretionary behaviors may not only result from career calling, but may also feed back to shape subsequent levels of calling. Future research would therefore benefit from longitudinal approaches such as latent growth modeling, which can capture the developmental trajectories and time-varying effects of vocational constructs, or cross-lagged panel modeling, which can examine reciprocal influences over time.

CRedit authorship contribution statement

Dan Zhu: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Formal analysis, Data curation,

Conceptualization. **Mao-Tang (Brian) Lin:** Writing – review & editing, Writing – original draft, Investigation, Conceptualization. **Gabriel Gazzoli:** Writing – review & editing, Writing – original draft, Validation, Investigation, Conceptualization. **In-Jo Park:** Writing – review & editing, Writing – original draft, Resources, Project administration, Methodology, Conceptualization. **Peter B. Kim:** Writing – review & editing, Writing – original draft, Validation, Supervision, Methodology, Investigation, Funding acquisition, Data curation, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

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