Adapting and Validating the Organizational Embeddedness Scale: An Empirical Study in the China's Hotel Industry

Xiao Cui[1,2], Wan Salmuni Wan Mustaffa[2]

[1]College of Tourism and Planning, Pingdingshan University, Pingdingshan, Henan,467000, People's Republic of China, [2]Faculty of Management and Economics, University Pendidikan Sultan Idris, Tanjung Malim, Perak, 35900,Malaysia

Abstract

This study aimed to adapt and validate the Organizational Embeddedness (OE) scale for Chinese hotels. An expert validation was carried out to evaluate the content validity, and a questionnaire was utilized to collect quantitative data from 132 frontline hotel employees in order to assess the content validity, construct validity, and reliability. The adapted scale demonstrated good content validity, and exploratory factor analysis revealed three factors: "Link," "Sacrifice," and "Fit," explaining 83.26% of the variance. The analysis confirmed high internal consistency, 0.931. The adapted OE scale exhibited good construct validity and reliability, making it a valuable tool for assessing employee engagement and commitment in Chinese hotels. The findings contribute to the existing literature on organizational embeddedness and offer practical implications for enhancing employee engagement in Chinese hotels.

Keywords: Organizational Embeddedness, Frontline Employees, Chinese Hotel, Validity, Reliability

Introduction

The issue of "high turnover" poses significant challenges to hotel management in China (Wen et al., 2020). Organizational embeddedness plays a significant role in understanding the factors that influence employee retention within an organization (Mitchell et al., 2001). The concept of organizational embeddedness (OE) highlights how individuals become deeply interconnected with organizations, primarily driven by a diverse range of links, investments, and evaluations. These elements intertwine to create a complex web of compelling factors that keep individuals engaged and connected to the organization (Mitchell et al., 2001; Peltokorpi et al., 2015).

The importance of organizational embeddedness has been emphasized in recent literature on organizational behavior, as it explains variations in critical work outcomes such as turnover, affective commitment, citizenship behavior, and task performance (Owusu-Ansah, et al., 2022; Yu et al., 2020). However, the investigation of organizational embeddedness in localization studies faces certain limitations. Research has examined the influence of cultural factors on organizational embeddedness(OE), indicating that diverse cultures interpret and apply the components of OE, such as fit and sacrifice, differently (Ramesh & Gelfand, 2010). The original conceptualization and research on job embeddedness by Mitchell et al. were primarily based on a Western cultural background. Given the disparities in cultural backgrounds, individual behaviors, thought processes, and values, it becomes necessary to examine the suitability of the organizational embeddedness concept and its content structure for Chinese enterprises within the context of China's national conditions. Consequently, localized research on organizational embeddedness becomes imperative.

In any field of research, developing and validating a measurement scale is considered a crucial step (DeVellis, 2016). However, Chinese scholars predominantly rely on the organizational embeddedness scales developed by Mitchell and Crossly, which do not account for Chinese cultural characteristics. Furthermore, while organizational embeddedness scales that consider Chinese cultural aspects for the new generation of farmers (Ting-ang & Wen-quan, 2013; Yunchuan & Yi, 2014), these scales have not been validated for use in the hotel industry. Hence, this study aims to utilize Chinese-specific scales and improve existing mature scales to create a measurement scale specifically tailored to evaluate organizational embeddedness among Chinese hotel employees.

Literature Review
Organizational Embeddedness

The theory of "job embeddedness" explains the factors that motivate employees to join an organization (Holtom et al., 2006; Mitchell et al., 2001). It consists of two dimensions: organizational embeddedness and community embeddedness. However, in the Chinese context, the lack of employee migration can be attributed to the influence of national concepts and the cultural value of stability. Chinese individuals who own a house within a community experience a relatively stable living environment, which provides them with a sense of stability and belonging, even without strong community ties. Consequently, the role of community in facilitating work integration for Chinese employees is somewhat diminished. Additionally, it should be noted that the community system in China is still developing, and the concept of community embeddedness may not be applicable. Therefore, this study focuses on analyzing organizational factors rather than community factors in the Chinese context.

Organizational Embeddedness (OE) refers to the factors that keep employees in their current jobs (Mitchell et al., 2001; Ng & Feldman, 2007). It consists of three components: fit, links, and sacrifice (Mitchell et al., 2001). "Fit" relates to how well an employee's values and abilities align with the organization's culture and demands (Ng et al., 2023). "Links" involve the employee's social connections with colleagues and involvement in workplace activities (Ng et al., 2023). When employees leave an organization, they face certain costs, known as "sacrifices," which include the things they would give up by switching to another job (Ng et al., 2023).

Measurement for Organizational Embeddedness

Initially, Mitchell et al (2001) developed measurement items for organizational embeddedness, consisting of three dimensions: fit, links, and sacrifices. Later, Holtom et al (2006) refined the scale, creating a shorter version with 9 items (Ampofo, Owusu-Ansah, et al., 2022; Mitchell et al., 2001). Additionally, perceived organizational embeddedness is a complex cognitive process influenced by individual factors that vary among employees (Crossley et al., 2007). To account for this, Crossley et al (2007) introduced a global measure of organizational embeddedness. Currently, there are two main approaches for assessing organizational embeddedness: a global perceptual measure (Crossley et al., 2007; Ng, 2016), and a measurement of the three dimensions (Holtom et al., 2006; Mitchell et al., 2001). Both scales have been validated and demonstrated reliability and validity through empirical studies (Ampofo & Karatepe, 2022; Muehlhausen et al., 2023; Ng, 2016; Zhang et al., 2012).

In this study, the focus is primarily on measuring organizational embeddedness through multiple dimensions. Although scales targeting migrant workers in the Chinese cultural context have been developed (Yunchuan & Yi, 2014), there is a lack of validated scales specifically designed for employees in the Chinese hotel industry, taking into account Chinese cultural characteristics.

By developing a multi-dimensional assessment scale for organizational embeddedness, future researchers can empirically examine the status of different dimensions of embeddedness among hotel employees and understand the influence of these dimensions on factors such as turnover intention. Ultimately, this knowledge can contribute to identifying strategies and interventions that enhance organizational embeddedness and effectively reduce employee turnover (Chan et al., 2019), which is significant importance in China's hotel industry.

Methods

Population and Sampling

This study specifically focused on frontline employees working in star-rated hotels in China. Star-rated hotels are significant within the hospitality industry due to their adherence to standardized operational practices. A common guideline suggests that the sample size should be at least 10 times the highest number of links directed at any latent variable in either the inner or outer model (Goodhue et al., 2012). In this study, each construct had 3 to 5 indicators, resulting in the estimation of 6 to 10 parameters. Following the recommended ratio of a sample size to estimated parameters of 10:1, a sample size of 60 to 100 responses was considered sufficient.

Using a convenient sampling method, this research selected a hotel management college from universities in China, where students are employed in various star-rated hotels nationwide. The researcher contacted the college administrator, explained the research plan, and assured the confidentiality of graduate information. With the school's permission, the researcher obtained email addresses of 400 graduates working in hotels. The questionnaire and instructions were sent to the respondents via email. Ultimately, 132 valid questionnaires were collected. The data collected from these respondents played a vital role in identifying potential issues and errors in the questions, allowing for necessary adjustments to ensure more accurate and meaningful data.

Scale Construction

This study used a three-dimensional scale from Holtom et al (2006) to measure how embedded employees feel within an organization. Taking into account Chinese cultural values

like "face" and "guanxi," the study incorporated the organizational embeddedness scale developed by YANG Ting-fang (2013) for the new generation of Chinese migrant workers (Ting-ang & Wen-quan, 2013). Two new items were added: "My colleagues (including superiors) in the hotel show great respect for me" and "I have good interpersonal relationships in the hotel." Table 1 provides the specific measurement items for evaluating fit, links, and sacrifice. Respondents could choose from a scale of 1 = "strongly disagree" to 5 = "strongly agree".

Table 1
Instrument for Organizational Embeddedness

Measures and Items	Adapted/Adopted	Authors
Fit		
F1.My job utilizes my skills and talents well.	Adopted	Holtom et al.2006, Mitchell et al.2001
F2.I feel like I am a good match for my organization.	Adopted	
F3.If I stay with my organization, I will be able to achieve most of my goals.	Adopted	
Link		
L1.I am a member of an effective work group.	Adopted	Holtom et al.2006, Mitchell et al.2001
L2.I work closely with my co-workers.	Adopted	
L3.On the job, I interact frequently with my work group members.	Adopted	
L4.The colleagues (including superiors) in my hotel respect me very much.	Adapted	YANG Ting-fang.2013
L5.I have good interpersonal relationships in the hotel	Adapted	
Sacrifice		
S1.I have a lot of freedom on this job to pursue my goals.	Adopted	Holtom et al.2006, Mitchell et al.2001
S2.The prospects for continuing employment with this organization are excellent	Adopted	
S3.I would sacrifice a lot if I left this job.	Adopted	

Methods for Validity and Reliability Analysis

Content validity is a study that determines how effectively each item in a measuring tool measures the intended concept (Enas Almanasreh et al., 2019; Sürücü & MaslakÇI, 2020). Experts are essential in assessing content validity by providing their expertise and opinions (Almanasreh et al., 2019). To ensure accuracy, an expert validation was conducted, gathering feedback on item comments, clarity, and quality. The content validity index (CVI) is commonly used to quantify content validity. It involves expert ratings on a 4-point scale, indicating the relevance or representativeness of each item. The CVI is calculated by dividing the number of experts who rated an item as 3 or 4 by the total number of experts, representing the level of agreement on content validity (Polit et al., 2007).

Construct validity can be divided into convergent and discriminant validity (Messick, 1989). It refers to how well a test or measurement tool accurately assesses the theoretical construct it intends to measure (Flake et al., 2022). Factor analysis is commonly used to evaluate construct validity, considering both convergent and discriminant aspects (Henseler et al., 2015). Reliability measures how consistently a measurement scale is used to assess internal consistency (Henseler et al., 2015). It indicates whether all items in a reliability test measure the same concept (Lechien et al., 2020). In this study, Cronbach's alpha was used as a measure of internal consistency, with a threshold of 0.7 considered as a good reliability indicator (Taber, 2018).

Results

Participant Demographics

According to the data presented in Table 2, a total of 132 valid responses were collected from frontline hotel employees in this study. The gender distribution of the participants indicated that 62% were female, while 38% were male. Additionally, the age distribution of the participants showed that the majority fell within the 18-39 age range. In terms of work experience, the majority of participants had been working in the hotel industry for three years or less. Moreover, a significant number of the participants were employed in high-star-rated hotels.

Table 1

Demographic characteristics of frontline employees in hotels (n = 132)

	Details N（%）	
Gender	Male 50 (37.8)	Female 82 (62.1)
Age	18–29 years 52 (39.4)	
	30–39 years 68 (51.5)	
	>40 years 12 (24.2)	
Your hotel level	Five-star 48 (36.4)	Four-star 46 (34.8)
	Three-star 28 (21.2)	1-2 stars 11 (8.3)
How long have you been working at the current hotel?	less than 3 years 63(47.7)	
	3-10 years 49 (37.1)	
	More than 10 years 20 (15.2)	

Content Vlidity

The selection of the appropriate number of experts for content validity depends on factors such as the desired level of expertise, the knowledge range within the panel, and the methodology employed (Fernández-Gómez et al., 2020). Almanasreh (2019) suggested involving 5 to 10 experts in the validation process for content validity (E. Almanasreh et al., 2019). In line with these recommendations, the revised questionnaire was distributed to a panel of five Chinese scholars who specialize in teaching and conducting research in the field of hotel management, specifically in the domain of Organizational Embeddedness. Additionally, two industry experts from the hotel industry were included in the panel (Table 3).

Table 3
Panel of Experts

NO.	Code	Position of Experts
1	E1	Professor (Hospitality Management), PingDingShan University, China
2	E2	Professor (Hospitality Management), PingDingShan University, China
3	E3	Professor (Tourism Management), Sichuan Tourism College, China
4	E4	Professor (Business Management), Zhengzhou University, China
5	E5	Lecturer (Tourism Management), Zhengzhou University, China
6	E6	Human Resources Manager, Five-star hotel, China
7	E7	Front Office Manager, Five-star hotel, China

The items with a CVI slightly lower than .78 (Polit et al., 2007) would be potential candidates for revision. The Content Validity Index (CVI) for each item was calculated based on evaluations from seven experts. As indicated in Table 4, all CVI values were within an acceptable range, indicating that the questionnaire demonstrated good content validity.

Table 4
The CVI of Items

Items	E1	E2	E3	E4	E5	E6	E7	Content Validity Index (CVI)
F1	4	4	3	3	3	3	3	1
F2	3	4	3	3	3	2	3	0.86
F3	3	4	4	4	3	3	3	1
L1	3	4	3	4	3	4	3	1
L2	3	4	4	4	4	3	4	1
L3	4	4	2	3	3	4	4	0.86
L4	3	4	4	4	4	3	4	1
L5	3	4	2	4	4	3	4	0.86
S1	3	4	3	4	4	3	4	1
S2	3	4	4	4	4	3	4	1
S3	3	4	4	4	4	3	4	1

Construct Validity

The provided data underwent exploratory factor analysis. The Kaiser-Meyer-Olkin (KMO) test results for OE yielded a satisfactory value of 0.878 (Table 5), indicating adequate sampling adequacy. Additionally, the Bartlett's test of sphericity showed a highly significant p-value of 0.000***, supporting the presence of intercorrelations among the variables and validating the appropriateness of the factor analysis. These findings confirm that the factor analysis was well-suited for the given data.

Table 5
KMO and Bartlett 's Test for OE

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.878
Bartlett's Test of Sphericity	Approx.Chi-Square	1211.882
	Df	55
	Sig	.000

The researchers conducted principal component analysis using varimax rotation and applied an eigenvalue criterion greater than 1 to extract two factors in OE. These factors explained a cumulative variance of 78.2%. However, these results deviated from the original questionnaire's intention of measuring OE through three dimensions. Upon conducting factor analysis using SPSS, it was observed that the items pertaining to the "fit" and "link" dimensions in the original questionnaire merged into a single dimension. This likely occurred due to the high correlation between the items in these two dimensions, making it challenging to separate them with an eigenvalue threshold of 1. In factor analysis, it is essential to consider the amount of variance in the dataset that needs to be explained. Typically, eigenvalues below 1 are considered as noise (Peng et al., 2019), and factors with eigenvalues greater than 1 are retained following the widely used criterion introduced by (Kaiser, 1974). Ivanenko (2004) suggested that during principal component analysis, it is acceptable to consider eigenvectors with corresponding eigenvalues greater than 0.5 to avoid disregarding significant factors (Ivanenko et al., 2004).

This study recognizes that "fit" and "link" dimensions are distinct and both have significant impacts on organizational embeddedness (OE). Consequently, the researcher decided to reduce the eigenvalue threshold to 0.5 during the principal component analysis. By applying this threshold, the analysis revealed three factors, which aligned with the original design. Moreover, these three factors exhibited an enhanced cumulative variance explained of 83.26%. As indicated in Table 6, Factor 1 represents 36.52 percent, Factor 2 contributes 27.463 percent, and Factor 3 contributes 19.292 percent to the overall variance.

Table 6
Results of Total Variance Explained for OE(eigenvalues > 0.5)

COM	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Var	Cum%	Total	% of Var	Cum%	Total	% of Var	Cum%
1	6.56	59.67	59.67	6.56	59.67	59.67	4.01	36.50	36.50
2	2.03	18.52	78.20	2.03	18.52	78.20	3.02	27.46	63.96
3	.55	5.05	83.25	.55	5.05	83.25	2.12	19.29	83.26

Note: Com=Component, Var=Variance, Cum=Cumulative

Table 7 presents the findings of the exploratory factor analysis (EFA) conducted to evaluate Organizational embeddedness (OE). Three factors were identified and utilized for the assessment. Factor 1, named "Link," encompassed five items (L1, L2, L3, L4, and L5) without any suggested relocations. The factor loadings for the "Link" items on Factor 2 were found to be 0.899, 0.836, 0.804, 0.731, 0.920, and 0.671. These results indicate that the items "L4. The colleagues (including superiors) in my hotel respect me very much" and "L5. I have good interpersonal relationships in the hotel," developed by YANG Ting-fang (2013) specifically for the Chinese context, effectively capture the aspect of "Link" between employees and the hotel. Factor 2, labeled as "Sacrifice," comprised three items (S1, S2, and S3) with no recommendations for removal or relocation. These items demonstrated loadings of 0.885, 0.832, and 0.892 on Factor 2. Similarly, Factor 3, referred to as Factor 1, consisted of three items associated with "Fit" (F1, F2, and F3), and no changes in item placement were suggested. The factor loadings for the "Fit" items on Factor 3 were observed to be 0.755, 0.729, and 0.692.

Table 7
Results of Rotated Component Matrix (OE)

	Factor1	Factor2	Factor3
F1			.755
F2			.729
F3			.692
L1	.899		
L2	.836		
L3	.804		
L4	.731		
L5	.920		
S1		.885	
S2		.832	
S3		.892	

Extraction method: Principal Component Analysis.
Rotation method: Varimax with Kaiser normalization.
a. The rotation has converged after 5 iterations.

The exploratory factor analysis (EFA) revealed that the three factors, namely "Fit," "Link," and "Sacrifice," along with their associated items, were deemed satisfactory. Particularly, the factor "Link" demonstrated the highest explanatory power for boundary-spanning behavior. Overall, the EFA confirmed the acceptability of all three factors and the 11 associated items, indicating that the Organizational embeddedness scale employed in this study possesses sound construct validity.

Reliability Analysis

The analysis of reliability revealed that all constructs had alpha (α) values above 0.7, indicating good internal consistency. This suggests that the survey instrument as a whole is reliable and satisfactory, as the data shows a high level of reliability. Moreover, since no confusions or issues were observed with the questionnaire, no modifications were required. The obtained values further support their reliability and can be confidently utilized.

Table 8
Cronbach 's Alpha of each construct

Construct	Number of items	Cronbach' alpha
Organizational embeddedness (OE)	9	0.931
Fit	3	0.914
Link	3	0.933
Sacrifice	3	0.905

Discussion

The findings provide valuable insights into the measurement instrument and its applicability in the Chinese context. The study employed various analyses, including content validity, exploratory factor analysis (EFA), and reliability analysis. The content validity assessment involved expert validation, which confirmed the accuracy and relevance of the questionnaire items. The questionnaire demonstrated good content validity, indicating that it effectively measured the intended construct of OE. EFA was conducted to assess construct validity. Initially, using a criterion of eigenvalues greater than 1, two factors were extracted. However, these results were inconsistent with the original design, as the "fit" and "link" dimensions merged into a single dimension. To address this, the researchers lowered the eigenvalue threshold to 0.5, revealing three factors that aligned with the original design. The study's findings are consistent with the research results of Ampofo (2022), which indicate that the three factors, namely "Link," "Sacrifice," and "Fit," effectively capture various aspects of OE in hotel industry (Owusu, et al., 2022).

Furthermore, reliability analysis was conducted to evaluate the internal consistency of the measurement scale. The constructs exhibited high internal consistency, as indicated by alpha (α) values exceeding 0.7. This suggests that the survey instrument is reliable and consistent in measuring the intended construct of OE. Overall, the study's findings support the adaptability of the Organizational Embeddedness Scale to Chinese hotels. The adapted scale demonstrated good construct validity and reliability. By examining the dimensions of "Link," "Sacrifice," and "Fit," the scale provides a comprehensive understanding of OE in the Chinese hotel industry. Overall, the measurement scale developed and validated in this study provides a reliable tool for assessing organizational embeddedness among Chinese hotel employees.

Conclusion

This study provides a rigorous examination of the validity and reliability of the adapted Organizational Embeddedness Scale in Chinese hotels. These results contribute to the existing literature on organizational embeddedness and its impact on outcomes in the hospitality sector. By considering the dimensions of fit, link, and sacrifice, organizations can gain insights into the factors that influence employee retention and develop strategies to enhance organizational embeddedness, ultimately reducing turnover rates.

The findings support the use of the scale as a valuable tool for measuring and understanding OE in the Chinese hospitality industry. The findings can inform future research and serve as a valuable tool for practitioners in understanding and enhancing employee engagement and commitment within Chinese hotels. However, it is important to acknowledge the limitations of this study. The research sample consisted of graduates from a hotel management college, which may limit the generalizability of the findings. Future studies should consider expanding the sample size and including a more diverse range of hotel employees. Additionally, further research could explore the predictive validity of the adapted scale by examining its relationship with other relevant variables in the Chinese hotel context.

References

Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Research in Social and Administrative Pharmacy*, *15*(2), 214-221. https://doi.org/https://doi.org/10.1016/j.sapharm.2018.03.066

Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Res Social Adm Pharm*, *15*(2), 214-221. https://doi.org/10.1016/j.sapharm.2018.03.066

Ampofo, E. T., & Karatepe, O. M. (2022). The effects of on-the-job embeddedness and its sub-dimensions on small-sized hotel employees' organizational commitment, work engagement and turnover intentions [Article]. *International Journal of Contemporary Hospitality Management*, *34*(2), 509-533. https://doi.org/10.1108/IJCHM-07-2021-0858

Ampofo, E. T., Owusu-Ansah, W., & Owusu, J. (2022). Organizational embeddedness and life satisfaction among star-rated hotel employees in Accra: The role of perceptions of organizational politics and job satisfaction. *Anatolia*, *33*(3), 389-403. https://doi.org/10.1080/13032917.2021.1944885

Ampofo, E. T., Owusu, J., Coffie, R. B., & Asiedu-Appiah, F. (2022). Work engagement, organizational embeddedness, and life satisfaction among frontline employees of star-rated hotels in Ghana. *Tourism and Hospitality Research*, *22*(2), 226-240. https://doi.org/10.1177/14673584211040310

Chan, W. L., Ho, J. A., Sambasivan, M., & Ng, S. I. (2019). Antecedents and outcome of job embeddedness: Evidence from four and five-star hotels. *International Journal of Hospitality Management*, *83*, 37-45. https://doi.org/10.1016/j.ijhm.2019.04.011

Crossley, C. D., Bennett, R. J., Jex, S. M., & Burnfield, J. L. (2007). Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. *Journal of applied psychology*, *92*(4), 1031. https://doi.org/10.1037/0021-9010.92.4.1031

Fernandez-Gomez, E., Martin-Salvador, A., Luque-Vara, T., Sanchez-Ojeda, M. A., Navarro-Prado, S., & Enrique-Miron, C. (2020). Content validation through expert judgement of an instrument on the nutritional knowledge, beliefs, and habits of pregnant women. *Nutrients*, *12*(4), 1136. https://doi.org/10.3390/nu12041136

Flake, J. K., Davidson, I. J., Wong, O., & Pek, J. (2022). Construct validity and the validity of replication studies: A systematic review. *American psychologist*, *77*(4), 576. https://doi.org/10.1037/amp0001006

Goodhue, D. L., Lewis, W., & Thompson, R. (2012). Does PLS have advantages for small sample size or non-normal data? *MIS quarterly*, 981-1001. https://doi.org/10.2307/41703490

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of Marketing Science*, *43*, 115-135. https://doi.org/10.1007/s11747-014-0403-8

Holtom, B. C., Mitchell, T. R., Lee, T., & Tidd, S. (2006). Less is more: Validation of a short form of the job embeddedness measure and theoretical extensions. *annual meeting of the Academy of Management, Atlanta*.

Holtom, B. C., Mitchell, T. R., & Lee, T. W. (2006). Increasing human and social capital by applying job embeddedness theory. *Organizational dynamics*, *35*(4), 316-331. https://doi.org/10.1016/jorgdyn.2006.08.007

Ivanenko, Y. P., Poppele, R. E., & Lacquaniti, F. (2004). Five basic muscle activation patterns account for muscle activity during human locomotion. *J Physiol*, *556*(Pt 1), 267-282. https://doi.org/10.1113/jphysiol.2003.057174

Lechien, J. R., Bobin, F., Muls, V., Thill, M. P., Horoi, M., Ostermann, K., . . . Dapri, G. (2020). Validity and reliability of the reflux symptom score. *The Laryngoscope*, *130*(3), E98-E107. https://doi.org/10.1002/lary.28017

Messick, S. (1989). Meaning and values in test validation: The science and ethics of assessment. *Educational researcher*, *18*(2), 5-11. https://doi.org/10.3102/0013189X01800200

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, *44*(6), 1102-1121. https://doi.org/10.5465/3069391

Muehlhausen, J., Spurk, D., Hirschi, A., & Sandmeier, A. (2023). Called to stay? The moderating roles of feedback from others and role clarity in the relationship between experiencing a calling and organizational embeddedness. *Career Development International*, *28*(2), 160-179. https://doi.org/10.1108/CD1-06-2022-016

Ng, T. W., & Feldman, D. C. (2007). Organizational embeddedness and occupational embeddedness across career stages. *Journal of Vocational Behavior*, *70*(2), 336-351. https://doi.org/10.1016/j.jvb.2006.10.002

Ng, T. W. H. (2016). Embedding employees early on: The importance of workplace respect. *Personnel psychology*, *69*(3), 599-633. https://doi.org/10.1111/peps.12117

Ng, T. W. H., Koopmann, J., & Lucianetti, L. (2023). Supervisor Age and Embeddedness, Employee Embeddedness, and Job Performance. *Work, Aging and Retirement*, *9*(2), 221-237. https://doi.org/10.1093/workar/waac003

Peltokorpi, V., Allen, D. G., & Froese, F. (2015). Organizational embeddedness, turnover intentions, and voluntary turnover: The moderating effects of employee demographic characteristics and value orientations. *Journal of organizational behavior*, *36*(2), 292-312. https://doi.org/10.1002/job.1981

Peng, Y., Albuquerque, P. H. M., do Nascimento, I. F., & Machado, J. V. F. (2019). Between nonlinearities, complexity, and noises: An application on portfolio selection using kernel principal component analysis. *Entropy*, *21*(4), 376. https://doi.org/10.3390/e21040376

Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in nursing & health*, *30*(4), 459-467. https://doi.org/10.1002/nur.20199

Ramesh, A., & Gelfand, M. J. (2010). Will they stay or will they go? The role of job embeddedness in predicting turnover in individualistic and collectivistic cultures. *J Appl Psychol*, *95*(5), 807-823. https://doi.org/10.1037/a0019464

Surucu, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, *8*(3), 2694-2726. https://doi.org/10.15295/bmij.v8i3.1540

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, *48*, 1273-1296. https://doi.org/10.1007/s11165-016-9602-2

Ting-ang, Y., & Wen-quan, L. (2013). Scale Development of New Generation Migrant Rural Worker's Job Embeddedness :The Moderating Effect of Community Embeddedness. *POPULATION & ECONOMICS*(04), 21-29.

Wen, B., Zhou, X., Hu, Y., & Zhang, X. (2020). Role stress and turnover intention of front-line hotel employees: the roles of burnout and service climate. *Frontiers in Psychology*, *11*, 36. https://doi.org/10.3389/fpsyg.2020.00036

Yu, J., Ariza-Montes, A., Giorgi, G., Lee, A., & Han, H. (2020). Sustainable relationship development between hotel company and its employees: Linking job embeddedness, job satisfaction, self-efficacy, job performance, work engagement, and turnover. *Sustainability*, *12*(17), 7168. https://doi.org/10.3390/su12177168

Yunchuan, C., & Yi, L. (2014). A Study of Organizational Embeddedness, Occupational Embeddedness and Job Performance of

Zhang, M., Fried, D. D., & Griffeth, R. W. (2012). A review of job embeddedness: Conceptual, measurement issues, and directions for future research. *Human Resource management review*, *22*(3), 220-231. https://doi.org/10.1016/j.hrmr.2012.02.004