

The Conditional Indirect Effect Model of Employees' Innovative Work Behavior

Bilal Khalid*  | Dr. Faisal Shafique Butt²  Muhammad Iftikhar Ali^{1*}  |

Dr. Robina Yasmin²  | Maryum Qayyum Satti² 

Abstract

The basic determination of the current study is to investigate the effect of employees' proactive personality in relation with their innovative work behaviors through mediation and moderation of employee engagement and long-term orientation respectively at workplace. The data collected from 220 employees working in hospitality industry through purposive sampling technique and analyzed through Smart-PLS, furthermore, the moderated-mediation index calculated through PROCESS-macro. The results show that the indirect outcome of proactive personality on innovative work is stronger than the direct effect. Although employee engagement plays an imperative role in bridging gap between employees' proactive personality and their innovative behaviors at workplace, but long-term orientation of employees' augment this mechanism. The best possible explanations, limitations and impending guidelines are deliberated.

Keywords: Proactive personality, employee engagement, innovative work behavior, hospitality industry

Author's Affiliation:


Institution: Riphah International University Islamabad¹⁻⁵ | COMSATS University Islamabad² | Bahria University, Islamabad³ | Iqra University⁴

Country: Pakistan

Corresponding Author's Email: *bilalkhalid2511@gmail.com

The material presented by the author(s) does not necessarily portray the view point of the editors and the management of the ILMA University, Pakistan.

(Online) 2409-6520 (Print) 2414-8393, published by the ILMA University, Pakistan.

This is open access article under the  license. <https://creativecommons.org/licenses/by/4.0/>

INTRODUCTION

In the present dynamic business environment, organizations are trying their best to survive in an organized manner achieving competitive advantage (Battistelli et al., 2014; Chowhan et al., 2017). In this regard, innovation is an imperative factor for bridging the gap between technological changes and business models according to the business needs (Ozretic-Došen, 2015; Wan et al., 2015). Consequently, organizations are focusing on innovation at the workplace through their employees for faster growth and overall organizational effectiveness. According to researchers (Janssen, 2000) innovation is all about to generate, promote and implement the new viable idea at the workplace and these stages/facets are a key factor for innovative work behavior as well. It plays pivotal role in handling more complex situations in the perspective of employee's innovative work behaviors. However, existing studies on employees' proactively have rarely addressed how innovative work behaviors are inclined by the effect of employee proactively. In fact, employees' proactive behavior is considered as primary tool used by organizations to derive specific behaviors from their employees.

In previous studies innovative work behavior research carried out at workplace with phenomenon's of personality (Yesil & Sozbilir, 2013), leadership style (Schuckert et al., 2018), psychological constructs (Kim et al., 2018), autonomy (Sönmez & Yıldırım, 2018). Researchers (Parker et al., 2010) conducted a study and concludes that proactive personality affects prevailing organizational settings and environment towards creating positive conduct of workers at the place of work. According to another study carried out in the context of hospitality industry, the individuals at the workplace with proactive personality hold specific creative and innovative behaviors through their effective employees' engagement in work settings (Seibert et al., 2001). The focus of study was employees' proactive personality in relation to the employees' innovative work on mediating stream of employee engagement at work under the condition of long-term orientation as an interacting mechanism. In the backdrop of globalization and organizational heterogeneity, the service sector especially the hotel industry is growing rapidly day by day and evaluating the performance of employees in terms of their innovative behaviors is demanding task for the employer due to varying personality factor.

The determination of this research study is to examine the phenomenon of innovative work behaviors and how these behaviors can be seen at the workplace through the lens of employees' proactive personality and their engagement levels at workplace. It aims to analyze the underpinned mechanism of employees' engagement capabilities within the hotel industry. The study identifies hypothetical support from the existing literature and practical support to Human Resource (HR) practitioners and managers especially working in Pakistani hotel industry. The findings of the study provide parameters to service organizations to create an innovative workforce and to count employees' proactive personality traits towards their work. The study is grounded on theory of trait activation and focused on individuals' personalities with their work performance related behaviors (Tett & Burnett, 2003).

LITERATURE REVIEW

The relevant literature is structured into sub-sections including proactive personality, innovative work behavior, mediating role of employee engagement, and mediating role of long-term orientation. Moreover, hypothesis development is carried out based on finding from the literature reported

2.1) PROACTIVE PERSONALITY AND INNOVATIVE WORK BEHAVIOR

Proactive personality can be defined as “behavior where the individual will take initiative to improve the current environment or create a new situation which will involve challenging the current status rather than passively adapting to present situations” (Crant, 2000). Proactive personality positively linked with innovative work behaviors at workplace (Mubarak et al., 2021). Employees’ proactive personality characteristics focus on new opportunities and develop a new way of doing rather than formalized structured provided by from the side of the organization (Sonnentag, 2003). In this regard, researchers (Bateman & Crant, 1993) describe that proactive personality based on individuals’ attitudinal and behavioral aspects, focuses on achieving a new way of doing at the workplace in an effective manner. Furthermore, individuals possessing proactive personality remain in the quest to get new information and try to apply it within present circumstances and also create a sense of encouragement among employees (Parker et al., 2010).

Moreover, other studies from the relevant literature show that the phenomenon of proactive personality is linked with various individual and organizational consequences like such as adaptability of career (Jiang, 2017), organizational citizenship behavior, job satisfaction (Liao, 2015), innovative boosting, networking and voice behaviors and job performance (Thompson, 2005). Parker et al. (2010) explain that individuals with proactive personality try to change their environment in a positive manner. In addition, employees with proactive personality try to improve/enhance self-behavior at the workplace (Chiaburu et al., 2006). In another researchers (Wu et al., 2018) adopted the model of behavioral concordance and found that people with a higher proactive personality are influenced towards proactive behavior, which increases their sense of capability over time.

The findings of the study also suggest that such behavioral consonance would contribute to enhancing a sense of competition among those with a higher proactive personality. Similarly, researchers (Xiong & King, 2018) concludes that an extremely proactive worker is more probable than a passive worker to display brand efficiency. In addition, in evolving employee brand performance, the influence of a proactive personality may supersede the influence of formal organizational support. In another study, researchers (Zhang et al., 2019) presents that High-Performance Work Systems (HPWS) can improve employee conduct and employee proactive personality mitigates HPWS effects.

Innovative work behaviors defined as “the planned formation, introduction and implementation of new ideas within an employee role, internally in groups or on

the whole organization, in order to improve employee role performance, the group or the organization” (Janssen, 2000). No doubt, innovative work behavior is an imperative and critical factor. It is aligned with organizational strategic component and enables organizations survive in the dynamic environment (Sonnentag, 2003). Janssen (2000) argues and explains that the concept of innovative work behavior in an organizational setting is related to new idea’s generation, its formulation, and implementation, and it is also aligned with employee role at individual and organizational levels. Similarly, the employees’ creativity is the main driver and antecedent of innovative work behavior at the workplace in an efficient and effective way (Shalley et al., 2000; Unsworth & Clegg, 2010).

Also, Perry-Smith and Shalley (2003) argue that innovative behaviors are based on idea generation and realization at the workplace. Researcher (West, 2002) explains that innovative work behavior is based on two stages i.e., problem identification (idea generation) and supporting (idea application) in work settings. Researchers (Kong & Li, 2018) scrutinized the possible impact of job-related effects and work engagement as mediators in the connection among proactive personality and innovative behavior. The outcomes reveal that proactive personality is meaningfully and positively associated to the innovative behavior of teachers.

H1: Proactive personality is significantly related to innovative work behavior.

(2.2) MEDIATING ROLE OF EMPLOYEE ENGAGEMENT

Researchers (Schaufeli et al., 2002) define engagement of employees at the workplace as “fulfilling positively the work-related mind characterized by vigor, dedication, and absorption”. Thus, employee engagement increases organizational efficiency, productivity and return on sale (Schneider et al., 2018). Although in recent past, the employee engagement concept again gains popularity. The domineering nature of this idea acquired consideration within the writings and in the applied approach as well. In the current era, the working of organizations is very diverse due to the industrial progression, the high engagement of employees within organizational context is very crucial. Pervious study (Clercq et al., 2014; Moreira, 2013) because of great level of engagement between workers, their distinct conducts positively move to an administrative outcome in an active way and decreases uncomfortable zone at the place of work. It shows that the impression of employees engagement is the “Holy Grail” inside an organization for administrative efficiency (Hart, 2016). In addition, the idea of engagement between employees at place of work is related with numerous individual behaviors (Rasheed et al., 2013). Fundamentally, it is a psychological outlook that attaches content employees additionally with their effort and organizations (Albrech, 2011; Anandhi & Perumal, 2013; Markos & Sridevi, 2010; Truss et al., 2013).

In the era of 21st century organizations are giving emphasis on their human resource for getting best results in the organizations through employee engagement properly (Andrew & Sofian, 2012). Though the employee engagement is related with numerous individual behaviors at the place of work, however, it is worth mentioning that through engagement, both managers and workers are harmonized with each other for organizational aims (Fleck & Inceoglu, 2010; González-

Romá et al., 2006; Newman et al., 2010). Although, the process of engagement of employee is an individual viewpoint but it is productive than the other related ideas/concepts (Bakker et al., 2008; Shaw & Bastock, 2005; Woodruffe, 2006). Workers are characterized into three clusters at employees level ('engaged, non-engaged & actively-disengaged') as recognized by (Coffman, 2000). In this regards, researchers (Young et al., 2018) examined the association among traits of personality and employee engagement.

H2: Proactive personality is positively related with employee engagement.

H3: Employee engagement is positively influenced by innovative work behavior.

H4: Employees' engagement plays a mediated role between the relationship of proactive personality and innovative work behavior.

(2.3) MODERATING ROLE OF LONG-TERM ORIENTATION

In the relevant literature, researchers (Hofstede & Bond, 1988) first introduced the concept of long-term orientation in the cultural setting, as one of the cultural dimensions and labeled it as 'Confucian Dynamism'. Later, researchers (Bearden et al., 2006) explained the concept of long-term orientation by developing its measuring scale, based on two dimensions planning (Lumpkin & Brigham, 2011) and tradition. According to researcher (Hofstede, 2001) individuals with short-term orientation are more curious for quick results rather long-term orientation individuals. Individuals on the cultural long-term orientation stream are good planners (Ng & Ng, 2003) and they save resources (Dwyer et al., 2005) for future purposes as well. On the other hand, employees' with proactive personality nature, focus on different ways of self-development and try to bring change in environment to move in future in a smooth way (Parker et al., 2010).

Researchers (X. Wu et al., 2018) scrutinized the connection among place of work undesirable conversation as professed by the targets, and proactive behavior by concentrating on the mediating part of the targets emotional fatigue and the moderating role of targets' traditionally. They found that workplace undesirable conversation is negatively connected to proactive behavior. The employees' engagement at workplace deals with individuals' fulfilling mind's state based on vigor-dedication-absorption (González-Romá et al., 2006). Engaged employees can easily generate creative ideas (Chang et al., 2013; De Spiegelaere et al., 2014). According to researchers (Tims et al., 2012) engaged employees' along-with proactive personality, try to modify theory jobs for better engagement and for creativity at workplace and fulfillment of performance levels tasks and contextual (Bergeron et al., 2014). Furthermore, study (Li & Mao, 2014) highlighted that proactive personality is aligned with workers' engagement levels at the workplace, and can further affect innovative work behavior in organizational settings.

H5: Long-term orientation significantly moderates the association of proactive personality and employee engagement.

H6: There is a conditional indirect effect of long-term orientation and proactive personality on innovative work behavior.

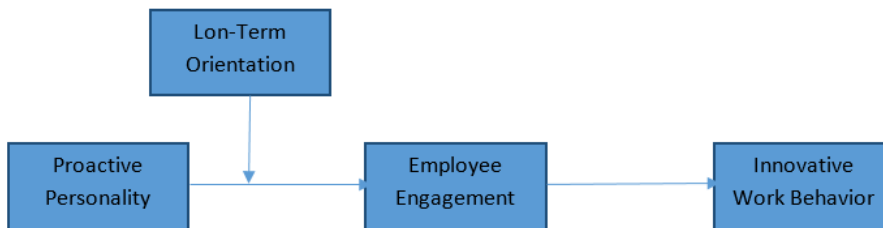


Figure 1 The study model

(3) METHODS

The study purpose was to scrutinize the moderated-mediation of long-term orientation and proactive personality on innovative work behavior through mechanism of employee engagement. The data collection was carried out through three time lags through self-reported questionnaire from employees of hotels in Pakistan. Time interval of six weeks was given in each time wave for data collection, in order to mitigate ‘common method variance’ (Podsakoff, 2003). In the study, 220 respondents from different 4* and 5* hotels actively participated and filled research questionnaires. The principle investigator, considering the research design and sampling technique picked employees of hotels including Marriott Hotel, Serena Hotel, Islamabad Hotel, Best Western Hotel, and Hotel De Papa’e Int. located in the geographical premises of Islamabad. Researchers (Sekaran & Bougie, 2016) documented that the ideal sample size must be within the range of 30 to 500 respondents. So, the sample size of 220 respondents based on purposive sampling was taken and sample size calculations were done through the method provided by (Saunders et al., 2009). The sample size of 220 respondents was selected based on limit set by (Sekaran & Bougie, 2016), and sample size calculations were done through the method provided by (Saunders et al., 2009).

(3.1) MEASURES

In this study, four different instruments were used to gauge the proactive personality, employee engagement, innovative work behavior, and long-term orientation. In order to gauge the proactive personality, a scale consisting of 10 items developed by (Seibert et al., 1999) is used. For employee engagement a scale consisting of 17 items developed by (Schaufeli et al., 2002) is considered in this study. Responses about innovative work behavior are received using a scale consisting of 17 items proposed by Janssen (2000). Finally, to measure the long-term orientation, a scale consisting of 4 item proposed by (Bearden et al., 2006) is considered. In the all instruments, 5-point Likert scale was used for each item. The validity of all four instruments is computed using Cronbach alpha with overall alpha score of 0.94, 0.90, 0.93, and 0.89 for proactive personality, employee engagement, innovative work behavior and long-term orientation, respectively.

(4) RESULTS

The computed results are organized into four sub-sections including demographics, measurement model, structural model and a comprehensive discussion along with future work directions. The details are provided in the sections below.

(4.1) DEMOGRAPHICS

The demographics statistics including gender, age, management level and qualification are provided in Table 1.

Table 1 Descriptive Statistics

Demographics	Description	Frequency	
Gender	Male	107	
	Female	113	51.4
Ag	20-25	26	
	35	15.9	
	26-30	42	19.1
	31-35	24	10.9
	36-40		
	13	5.9	
	41-45	40	18.2
	46-50		
Management Level	40	18.2	
	51 & above		
	Lower	12	5.5
	Middle	121	55.0
	Upper	87	39.5

Qualification	Undergraduate	10	4.5
	Graduation	97	44.1
	Master & above	113	51.4

(4.2) MEASUREMENT MODEL

The model of measurement was based on inner constancy, convergent and discriminant validity. The outcomes of internal consistency (alpha values), composite reliability met the onset value (0.7) and stated in Table-2, on the other hand for convergent validity AVE (Average Variance Extracted) was considered holding threshold value (greater than 0.5). Item including PP8, PP9, PP10, EE2, EE6, EE11, EE12, EE13, EE14, EE15, EE16, EE17, and LOT4 were dropped due to bad factor loading and the model was recalculated as depicted in Figure 2

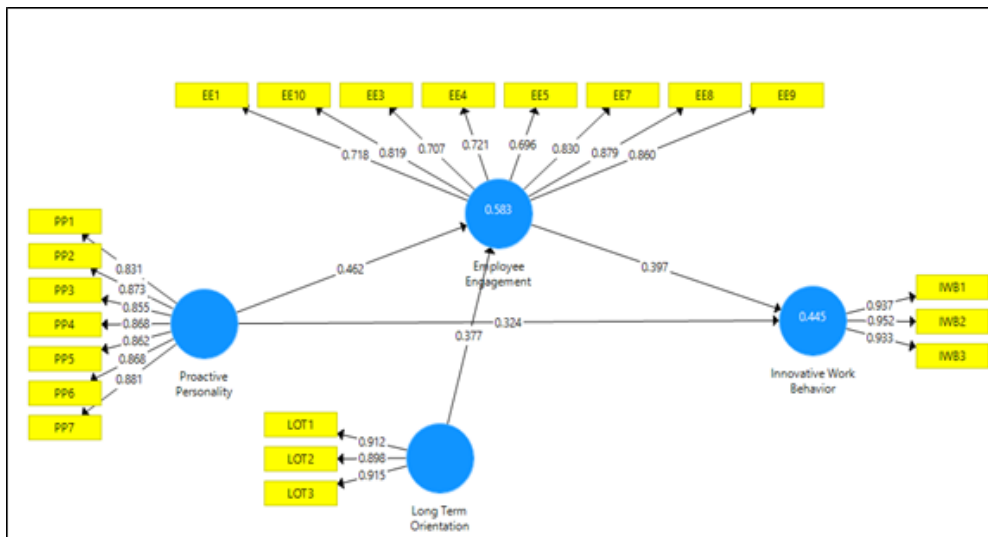


Figure 2 Graphical representation of Measurement Model

Table 2 Measurement Model (Estimates)

Constructs	Items	Loadings	Cronbach alpha	Composite Reliability (CR)	Average Variance Extracted (De Clercq et al.)
------------	-------	----------	----------------	----------------------------	---

Employee Engagement	EE1	0.718	0.909	0.926	0.612
	EE3	0.707			
	EE4	0.721			
	EE5	0.696			
	EE7	0.830			
	EE8	0.879			
	EE9	0.860			
	EE10	0.819			
Innovative Work Behavior	IWB1	0.937	0.935	0.959	0.885
	IWB2	0.952			
	IWB3	0.933			
Long-Term Orientation	LOT1	0.912	0.894	0.934	0.825
	LOT2	0.898			
	LOT3	0.915			
Proactive Personality	PP1	0.831	0.943	0.953	0.744
	PP2	0.873			
	PP3	0.855			
	PP4	0.868			

PP5	0.862
PP6	0.868
PP7	0.881

Discriminant validity was evaluated through Fornell and Larcker's criterion (Fornell & Larcker, 1981) and through HTMT (Hetrotrait-Monotrait) ratio as provided by researchers (Henseler et al., 2015). The values met the threshold boundary and less than 0.85 (Kline, 2011). The outcomes are revealed in Table 3 and 4

Table 3 Fornell and Lacker's Criterion

Constructs	1	2	3	4
(1) Employee Engagement (EE)	0.782			
(2) Innovative Work Behavior	0.626	0.941		
(3) Long-Term Orientation	0.679	0.321	0.908	
(4) Proactive Personality	0.709	0.605	0.654	0.8

Table 4 HTMT Ratio

Constructs	2	3	4
(1) Employee Engagement			
(2) Innovative Work Behavior	0.645		
(3) Long-Term Orientation	0.768	0.350	
(4) Proactive Personality	0.762	0.641	0.630

(4.3) DIRECT AND INDIRECT EFFECTS

The path model was analyzed to inspect the direct and indirect paths estimates and to analyze the mediating and moderating effect of the study model. The structural model was run through bootstrapping (5000) to generate path coefficients (Beta), t-values, and coefficient of determination (R²). The R² computed value 0.445 explained 44 percent variation in the innovative work behavior whereas 0.598 explained 59 percent variation in employee engagement. The scores of path model are presented in Table 5.

Table 5 Direct Effects

Hypothesis	Relationship	β	t-value	p-value	Decision	R ²
H1	PP \longrightarrow IWB	0.324	3.690	0.000	Supported	0.445
H2	PP \longrightarrow EE	0.462	7.373	0.000	Supported	0.598
H3	EE \longrightarrow IWB	0.397	4.424	0.000	Supported	
	LOT \longrightarrow EE	0.377	5.279	0.000	Supported	
H5	PP x LOT \longrightarrow EE	0.147	2.594	0.010	Supported	

For mediation analysis, total and specific effects of employees' proactive personality on their innovative work behaviors with and without employee engagement is calculated and results are reported in Table 6, whereas moderated-mediation calculated via PROCESS macro and results are presented in Table 7.

	Path	t-value		Path	t-value	Decision
Direct Effect			Indirect Effect (H4)			
PP	→ IWB	0.198	3.402	PP → EE	0.245	3.923
				→ IWB		Supported

Table 7 Moderated-Mediation Index

	Index	SE (boot)	LLCI	ULCI
Long-Term Orientation	0.0381	0.0176	0.0108	0.0791

Results of mediation analysis reported in table 6 indicate that indirect outcome of proactive personality on innovative work behaviors via employee engagement (0.245) is greater than the direct effect (0.198), so, it is settled that employee engagement mediates between the connection of proactive personality and innovative work behavior. Table 7 presents outcomes of moderated- mediation, the index was calculated to scrutinize the moderated-mediating effect of long-term orientation on innovative work behavior with bootstrapping (5000) at 95% confidence interval. The results of index is supported as zero is not lying between LLCI and ULCI (lower and upper level confidence intervals), therefore, it is concluded that moderated-mediation phenomenon exist in the present study.

(5) DISCUSSION

The basic aim of the current study is to analyze the effect of proactive personality in nurturing employees' innovative behavior in Pakistan's hotel industry and to outspread the preceding works by examining the impact of moderated-mediation of long-term orientation and employee engagement on the connotation of proactive personality and their innovative work behaviors among hotel employees. The study results are according to the existing research studies lead by researchers (Kong & Li, 2018; Li & Mao, 2014; Parker et al., 2010). According to the reported results of these studies, proactive personality is aligned with workers' engagement levels at the workplace, and can further affect innovative work behavior in organizational settings. Employee engagement provides dedication and commitment to employees towards their work, and also linked with innovative work behaviors (Mubarak et al., 2021). The employees higher in their proactive personality traits, more engaged in their work (Kong & Li, 2018). Moreover, there is the indirect impact of proactive personality on innovative work behaviors by means of employee engagement and this indirect effect is greater than the direct effect, which is consistent with the

study of Kong and Li (2018). Overall, results show that the employee engagement mediates between the association of proactive personality and innovative work behavior and it concludes that moderated-mediation phenomenon exists in this study.

On the other hand, the mediation analysis supported the serial pathway - proactive positive personality affects innovative behavior in the engagement of work. These findings indicate that staff with an extremely proactive character is more involved in probing for chances, demonstrating initiative and participating in growth than those with a fewer proactive personality. These findings shows that employees with an extremely proactive personality were more involved in penetrating for openings, demonstrating initiative and participating in development than those employees with a fewer proactive personality. It confirms that the proactive personality encourages the innovative behavior in multitudes of ways. For instance, ones with very proactive personality tend to grow community grids (Thompson, 2005), has a high degree of autonomy, and have positive emotions with their work (Randolph & Dahling, 2013; Seibert et al., 1999).

The current research is finally not free of constraints. Since, the research was conducted only in the hotel sector and the short-term analysis was performed. Further, to regulate the cause-effect relationships between the study variables, future work can adopt a longitudinal or experimental design. Moreover, future research can extend this work by exploring both the short and long-term to investigate the association between proactive personality and innovative work behavior. In addition, this research has collected the information through self-report only. The future work directions may implementation of multiple evaluation approaches to settle and to get better legitimacy of our research.

(5.1) CONCLUSION

The current study is based on moderated-moderation model. Besides this, a partial least square is also used for better understanding of mechanism and boundary condition. The study examined the factors influencing employees' innovative work behavior at workplace in hotel industry of Pakistan. The study also examined the employees' engagement levels in best possible way that how employees can be engaged in more effectively. Based on the calculated results, researchers concluded that proactive personality leads employee engagement, resultantly innovativeness at workplace rise. The results also show that boundary condition of long-term orientation plays pivotal role in increasing innovative work behaviors of employees.

REFERENCES

- Albrech, S. L. (2011). Handbook of employee engagement: Perspectives, issues, research and practice. Human Resource Management International Digest.
- Anandhi, K., & Perumal, R. (2013). Job satisfaction in logistics sector: A review and research agenda. *International Journals of Marketing and Technology*, 3(5), 114–126.

- Andrew, O. C., & Sofian, S. (2012). Individual factors and work outcomes of employee engagement. *Procedia-Social and Behavioral Sciences*, 40, 498–508.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187–200.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103–118.
- Battistelli, A., Montani, F., Odoardi, C., Vandenberghe, C., & Picci, P. (2014). Employees' concerns about change and commitment to change among Italian organizations: the moderating role of innovative work behavior. *The International Journal of Human Resource Management*, 25(7), 951–978.
- Bearden, W. O., Money, R. B., & Nevins, J. L. (2006). A measure of long-term orientation: Development and validation. *Journal of the Academy of Marketing Science*, 34(3), 456–467.
- Bergeron, D. M., Schroeder, T. D., & Martinez, H. A. (2014). Proactive personality at work: Seeing more to do and doing more? *Journal of Business and Psychology*, 29(1), 71–86.
- Chang, H., Hsu, H., Liou, J., & Tsai, C. (2013). Psychological contracts and innovative behavior: a moderated path analysis of work engagement and job resources. *Journal of Applied Social Psychology*, 43(10), 2120–2135.
- Chiaburu, D. S., Baker, V. L., & Pitariu, A. H. (2006). Beyond being proactive: what (else) matters for career self-management behaviors? *Career Development International*.
- Chowhan, J., Pries, F., & Mann, S. (2017). Persistent innovation and the role of human resource management practices, work organization, and strategy. *Journal of Management & Organization*, 23(3), 456–471.
- Coffman, C. (2000). Is Your Company Bleeding Talent. How to Become a True “Employer of Choice”. *The Gallup Management Journal*, 74–85.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435–462.
- De Clercq, D., Bouckennooghe, D., Raja, U., & Matsyborska, G. (2014). Unpacking the goal congruence–organizational deviance relationship: The roles of work engagement and emotional intelligence. *Journal of Business Ethics*, 124(4), 695–711.
- De Spiegelaere, S., Van Gyes, G., De Witte, H., Niesen, W., & Van Hootehem, G. (2014). On the relation of job insecurity, job autonomy, innovative work

- behaviour and the mediating effect of work engagement. *Creativity and Innovation Management*, 23(3), 318–330.
- Dwyer, S., Mesak, H., & Hsu, M. (2005). An exploratory examination of the influence of national culture on cross-national product diffusion. *Journal of International Marketing*, 13(2), 1–27.
- Fleck, S., & Inceoglu, I. (2010). A comprehensive framework for understanding and predicting engagement. *The Handbook of Employee Engagement: Perspectives, Issues, Research, & Practice*, 31–42.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 68(1), 165–174.
- Hart, A. J. (2016). Exploring the Influence of Management Communication Behaviors on Employee Engagement.
- 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(1), 115–135.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5–21.
- Janssen, O. (2000). Job demands, perceptions of effort–reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302.
- Jiang, Z. (2017). Proactive personality and career adaptability: The role of thriving at work. *Journal of Vocational Behavior*, 98, 85–97.
- Kim, T. T., Karatepe, O. M., & Lee, G. (2018). Psychological contract breach and service innovation behavior: psychological capital as a mediator. *Service Business*, 12(2), 305–329.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3. Bask1). New York, NY: Guilford.
- Kong, Y., & Li, M. (2018). Proactive personality and innovative behavior: The mediating roles of job-related affect and work engagement. *Social Behavior and Personality: An International Journal*, 46(3), 431–446

- Li, L., & Mao, S. (2014). Moderating effects of proactive personality on factors influencing work engagement based on the job demands-resources model. *Social Behavior and Personality: An International Journal*, 42(1), 7–15.
- Liao, P. (2015). The role of self-concept in the mechanism linking proactive personality to employee work outcomes. *Applied Psychology*, 64(2), 421–443.
- Lumpkin, G. T., & Brigham, K. H. (2011). Long-term orientation and intertemporal choice in family firms. *Entrepreneurship Theory and Practice*, 35(6), 1149–1169.
- Markos, S., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International Journal of Business and Management*, 5(12), 89.
- Moreira, M. E. (2013). Business Benefits of Being Agile. In *Being Agile* (pp. 15–23). Springer.
- Mubarak, N., Khan, J., Yasmin, R., & Osmadi, A. (2021). The impact of a proactive personality on innovative work behavior: the role of work engagement and transformational leadership. *Leadership & Organization Development Journal*.
- Newman, D. A., Joseph, D. L., & Hulin, C. L. (2010). Job attitudes and employee engagement: Considering the attitude “A-factor.” *The Handbook of Employee Engagement: Perspectives, Issues, Research, and Practice*, 43–61.
- Ng, Y.-K., & Ng, S. (2003). Do the economies of specialization justify the work ethics?: An examination of Buchanan’s hypothesis. *Journal of Economic Behavior & Organization*, 50(3), 339–353.
- Ozretic-Došen, Đ. (2015). Enabling innovation and creativity in market-oriented firms. *Baltic Journal of Management*, 10(2), 144–165.
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856.
- Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 885(879), 10–1037.
- Randolph, K. L., & Dahling, J. J. (2013). Interactive effects of proactive personality and display rules on emotional labor in organizations. *Journal of Applied Social Psychology*, 43(12), 2350–2359.
- Rasheed, A., Khan, S., & Ramzan, M. (2013). Antecedents and consequences of employee engagement: The case of Pakistan. *Journal of Business Studies Quarterly*, 4(4), 183.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Schneider, B., Yost, A. B., Kropp, A., Kind, C., & Lam, H. (2018). Workforce engagement: What it is, what drives it, and why it matters for organizational performance. *Journal of Organizational Behavior*, 39(4), 462–480.
- Schuckert, M., Kim, T. T., Paek, S., & Lee, G. (2018). Motivate to innovate: How authentic and transformational leaders influence employees' psychological capital and service innovation behavior. *International Journal of Contemporary Hospitality Management*.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54(4), 845–874.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. *Academy of Management Journal*, 43(2), 215–223.
- Shaw, K., & Bastock, A. (2005). *Employee engagement: How to build a high-performance workforce*. Chicago: Melcrum Publishing Limited.
- Sonnentag, S. (2003). Recovery, Work Engagement, and Proactive Behavior: A New Look at the Interface between Nonwork and Work. *Journal of Applied Psychology*, 88(3), 518–528.
- Sönmez, B., & Yıldırım, A. (2018). The mediating role of autonomy in the effect of pro-innovation climate and supervisor supportiveness on innovative behavior of nurses. *European Journal of Innovation Management*.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88(3), 518.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500.
- Thompson, J. A. (2005). Proactive personality and job performance: a social capital perspective. *Journal of Applied Psychology*, 90(5), 1011.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the

- job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186.
- Truss, C., Shantz, A., Soane, E., Alfes, K., & Delbridge, R. (2013). Employee engagement, organisational performance and individual well-being: exploring the evidence, developing the theory. Taylor & Francis.
- Unsworth, K. L., & Clegg, C. W. (2010). Why do employees undertake creative action? *Journal of Occupational and Organizational Psychology*, 83(1), 77–99.
- Wan, F., Williamson, P. J., & Yin, E. (2015). Antecedents and implications of disruptive innovation: Evidence from China. *Technovation*, 39, 94–104.
- West, M. A. (2002). Ideas are ten a penny: It's team implementation not idea generation that counts. *Applied Psychology*, 51(3), 411–424.
- Woodruffe, C. (2006). The crucial importance of employee engagement. *Human Resource Management International Digest*.
- Wu, C.-H., Deng, H., & Li, Y. (2018). Enhancing a sense of competence at work by engaging in proactive behavior: the role of proactive personality. *Journal of Happiness Studies*, 19(3), 801–816.
- Wu, X., Kwan, H. K., Wu, L.-Z., & Ma, J. (2018). The effect of workplace negative gossip on employee proactive behavior in China: The moderating role of traditionality. *Journal of Business Ethics*, 148(4), 801–815.
- Xiong, L., & King, C. (2018). Too much of a good thing? Examining how proactive personality affects employee brand performance under formal and informal organizational support. *International Journal of Hospitality Management*, 68, 12–22.
- Yesil, S., & Sozbilir, F. (2013). An empirical investigation into the impact of personality on individual innovation behaviour in the workplace. *Procedia-Social and Behavioral Sciences*, 81, 540–551.
- Young, H. R., Glerum, D. R., Wang, W., & Joseph, D. L. (2018). Who are the most engaged at work? A meta-analysis of personality and employee engagement. *Journal of Organizational Behavior*, 39(10), 1330–1346.
- Zhang, J., Bal, P. M., Akhtar, M. N., Long, L., Zhang, Y., & Ma, Z. (2019). High performance work system and employee performance: the mediating roles of social exchange and thriving and the moderating effect of employee proactive personality. *Asia Pacific Journal of Human Resources*, 57(3), 369–395.