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## Organizational Resilience Moderating Employees Psychological Traits and Entrepreneurial Orientation: Evidence from Tourism Sector of Pakistan

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### ARTICLE DETAILS

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### ABSTRACT

This research was conducted to ascertain effect of Organizational Resilience's (OR) moderation over the employees' psychological traits and entrepreneurial orientation (EO) of tourism SMEs operating in KPK (Khyber Pakhtunkhwa) province of Pakistan. The study heaved its underpinning from resource-based view (RBV) theory. Primary data was obtained from a random sample of 591 managers of tourism SMEs. Data was analyzed through Andrew F. Hayes process macro in SPSS version 23. The results showed positive moderation of organizational resilience over the relationship. Findings confirmed that organizational resilience fosters organizational EO which implicates selection of employees after assessment of their psychological traits and followed by adequate training and development to channelize employee psychological resources to fuel spirit in EO in highly sought-after services sector of economy i.e., tourism sector. This research has theoretical contribution in linking employees' psychological traits in organizational process; which emphasizes on need of due diligence in HRM activities like selection and training & development which is a cornerstone in developing organizational resilience. SMEs operating in service sector in general and tourism sector in particular have useful practical implication of this study.



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### Introduction

Employees psychological resources, organizational entrepreneurial orientation and organizational resilience are some of the buzz words in today's research context (Leonelli et al., 2022; Xia et al., 2022). To understand this phenomenon in an organizational setting, one

has to examine these constructs from individual employee's lens and connect these two levels of conceptualizations. Behavioural theories of the firm serve as the background through which one can study these constructs in organizations; whereby human resource is made up of employees' having their psychological makeup which contribute in setting up organizational parameters like entrepreneurial orientation (Ferreira et al., 2021). Recently, many studies have used these constructs weaved in revealing relationships (Basco et al., 2020; Bhatti et al., 2020; Nakku et al., 2020; Onwe et al., 2020). Liao et al. (2017) emphasized that in a service sector like tourism, the ultimate source of sustainable advantage will be the capability of organizations to inculcate resilience at higher pace than their competitor. Alternatively, it means, when organizations invest in building organizational resilience then the result is higher EO and better dividends than competitors whose priorities are different.

In Pakistan, tourism has highest growth and sustainability potential which has been untapped so far. This empirical research was conducted in KPK province of Pakistan that has the highest number of tourist attractions in the country (Ullah et al., 2021). Psychological traits of employees cast direct reflections on the EO of tourism SMEs. Okhomina (2010) used tolerance for ambiguity (TA), need for achievement (nAch) and internal locus of control (ILOC) as key antecedents of entrepreneurial behaviour by employees of automobile industry in Carolina State, USA. Hartmann et al. (2022) posited role of OR as moderator in connecting organizational resources towards EO in small business organizations. This research used TA, nAch and ILOC as major psychological traits of employees in tourism SMEs using scale developed by Okhomina (2010) and OR scale developed by Orchiston et al. (2016). Primary data was collected by 591 managers of tourism SMEs. Due to random selection of respondents the findings are highly generalizable in national and international contexts.

### **Problem Statement**

A commonplace observation in tourism SMEs in Pakistan is high rate of turn-over of employees. Even, these individuals are not properly trained for their jobs before they are laid-off. These employees are frequently hired, fired and taken as dispensable commodity when SMEs face crisis which it is quite vulnerable, owing to their very fragile nature (Iborra et al., 2020). This results in wastage of an important human resource which could have otherwise put to use by utilizing their acquired talent. This sheer wastage not only damages EO of SMEs but also paralyzes overall organizational resilience. Secondly, during staffing process, psychological makeup of employees' is not considered which makes up for quite an essential antecedent of EO in any organization. On theoretical side, scant studies undertook organizational resilience, psychological traits of employees and entrepreneurial orientation of tourism SMEs (Hartmann et al., 2022).

### **Research Gap**

Bouaziz and Smaoui Hachicha (2018) mentioned that "organizational resilience has been identified as the missing link in the examination of entrepreneurial orientation and employees psychological traits". Tibay et al. (2018) highlighted that level of organizational resilience moderates the stoutness (in terms of EO) arising from psychological traits of employees while making resilience as its source of sustainable advantage over the competitors. Another gap that was identified was placement of EO construct in relationship as dependent variable. In majority of researches, EO has been used as independent variable and predictor of organizational growth, cutting edge innovation and firm's performance (Altinay et al., 2015; Koenig et al., 2013; Onağ et al., 2014) and minimal attention was given to EO as dependent variable. Hillmann and Guenther (2021) mentioned that OR owing to its complicated multi-dimensional nature and issues with measurement has not been studied with many relevant

constructs in as dependent construct. No study could be found which used OR as moderator between psychological traits and EO. This research filled this important gap.

### **Research Objectives**

This research achieved following objectives: -

- To assess impact of TA, nAch and ILOC of employees on EO of tourism SMEs, in presence and absence of OR as a moderator.
- To recommend points in light of our finding that strengthen organizational resilience in Tourism SMEs

### **Research Questions**

- What is individual impact of TA, nAch and ILOC of employees on EO of tourism SMEs?
- What is individual impact of TA, nAch and ILOC of employees on EO of tourism SMEs with OR as a moderator?
- What is combined impact of TA, nAch and ILOC of employees on EO of tourism SMEs?
- What is combined impact of TA, nAch and ILOC of employees on EO of tourism SMEs with OR as a moderating variable?
- How OR can be used to cement psychological traits of employees working in tourism SMEs and other organizations?

### **Tourism Sector of Pakistan**

In Pakistan, tourism sector has huge untapped potential and can be a game-changer for the country in longer run. Nature has bestowed Pakistan with radiating diverse culture including old dynasties legacies and heritage, world renowned mountain ranges and peaks, enchanting countryside and landscapes, beautiful lakes and rich flora and fauna (Arshad et al., 2018). This glorying nature of tourism results in high influx of national and international visitors in the country. Khalique et al. (2020) noticed that tourism SMEs are not defined in Pakistan and SMEs operating in tourism support (food, recreation, transportation, accommodation and traveling services) can be labelled as tourism SMEs. Burhan et al. (2020) reported 3.8 million SMEs operating in tourism sector in Pakistan out of which 0.45 million are in KPK province. Arshad et al. (2018) informed that KP tourism department has formalized the tourism SMEs operating in the province and complete list is maintained centrally. Overall for conceptualizing this study, we have followed the guidelines provided in the previous research in the social science research (e.g., Ahmed, Nawaz, & Rasheed, 2019; Anser et al., 2022; Anser et al., 2020; Chang et al., 2022; Gulzar, Ahmad, Hassan, & Rasheed, 2022; Hameed et al., 2019; Hameed, Muhammad Naeem, Rasheed, & Moin, 2023; Iqbal et al., 2021; Kanwal, Pitafi, Rasheed, Pitafi, & Iqbal, 2022; Kanwal, Rasheed, Pitafi, Pitafi, & Ren, 2020; Khalid, Weng, Luqman, Rasheed, & Hina, 2022, 2023; Khan, Liu, Khan, Liu, & Rasheed, 2020; Khizar, Iqbal, & Rasheed, 2021; Rasheed, Pitafi, Mishra, & Chotia, 2023; Rasheed & Weng, 2019; Rasheed, Weng, Umrani, & Moin, 2021; Rasheed, Yousaf, & Noor, 2011).

### **Literature review**

McGregor and Cutcher-Gershenfeld (1960) in their seminal book “The human side of enterprise” stressed that human capital is the building block of all types of organizations and performance of organization is a direct reflection of quality of its men. The energy any organization emits in form of brilliance inevitably comes from its human energy which runs across in organizational arteries. This entails prudent selection of employees and their subsequent training and development. It is evident that a good quality employee with

adequate psychological traits, when groomed appropriately put all his energies in pursuance of organization goals more vigorously than others (Palmer et al., 2019). A robust training regime must aim at expanding the abilities of employees and becomes an enabler in enhancing organizational resilience. Quality of human resource is plays vital role in nurturing organizational resilience which cements further the psychological traits and become source of organizational EO. In such case the outcome will be a visible positive shift in overall organizational EO, which is more pronounced in tourism sector.

### **Entrepreneurial Orientation (EO)**

Researchers posit that EO is an organizational concept which can be viewed from both external and internal perspectives. Internally it is about creation and sustenance of an entrepreneurial spirit in different organizational outfits which provides a guidance principle for setting up rules and regulations, delineating policies, development of organizational culture, routine practices and participative decision making directed towards capitalization upon existing market opportunities and horizontal and vertical market growth as a means of reaching optimal market-share, speedy organizational growth and higher profit returns (Lumpkin & Dess, 1996). Ireland et al. (2009); Lumpkin and Dess (1996) deem EO as a strategy for achieving highest quality in its processes and gain competitive advantage. Externally it refers to the perception of competitors about the posture of the organizations in reaching to the market and competing in a way to win. Mintzberg (1973) firstly used this term with three dimensions innovativeness, risk-taking, and proactive-ness. Covin and Wales (2012) confirmed these dimensions to be risk-taking, innovation and proactive-ness. Researchers argue that organizations can be ranked according to their EO standing at all times in competitive landscapes. Wales et al. (2013) recommended EO should be explored with different moderators and mediators to reach to a total understanding. Baporikar (2017) defines EO to be a concept weaved around entrepreneur and entrepreneurship. Concept of EO is not only evolving at a rapid pace but also being studied in relations to psychological traits recently, Gugnani (2022) studied effect of Locus of control (LOC) on individual EO under moderation of self-efficacy in small business owners.

### **Organizational Resilience (OR)**

Organizational resilience was never a new concept in management science but the concept has always been found on the cross-roads of many disciplines including engineering, environmental, psychology, business and many others. This fluid nature of variability has led to many competitive definitions but there is a consensus among researchers about promising nature of the concept (Hillmann & Guenther, 2021). Staw et al. (1981) used OR concept for the first time in management as negative adjustment with external environment while keeping internal dynamics intact. OR concept is quite contrasting to classical management concepts of adaptability, learning and flexibility. Rodríguez-Sánchez et al. (2021) termed resilience as the capability to get back to earlier state after encountering a rapid change. Hamel and Välikangas (2003) defined OR as capacity to reconstruct business model to meet external environment. Chen, Xie, et al. (2021) highlighted an extensive definition of OR which includes utilization of organizational resources to optimize processes and reshape interrelationships among business models. Orchiston et al. (2016) utilized 13 indicators that govern the OR in tourism organizations.

### **Psychological Traits**

Drucker (2014) highlighted that entrepreneur is an agent of change and starts an economic activity derived through his psychological traits. Schumpeter (1934) mentions change orientation as the most important entrepreneurial trait, which is required by entrepreneur to fulfil his desire to sets dis-order state into an ordered state for economic creativity. Alam

(2011) proposed that organizational innovations can be achieved through seven distinct psychological traits possessed by employees. According to Koenig et al. (2013) EO, psychological traits are positively correlated. Mantok et al. (2019) studied three psychological traits TA, nAch and ILOC as antecedents of EO and we are using these three traits in our research model.

### **Tolerance for Ambiguity (TA)**

Norton (1975) defined that TA is a psychological tendency of an individual to remain calm in situations which are not very clear or ambiguous, non-supportive or non-vibrant with air of uncertainty surrounding them. His definition of ambiguity is “too little, too much or seemingly contradictory information”. According to Budner (1962) it is a situation which cannot be properly understood by person confronting it due to deficiency or excess of information then required. These situations may be totally new, confusing or too difficult. Nonetheless, it is argued to be one of the desirable traits related to entrepreneurs. Bearse (1982) mentioned that TA is a must have entrepreneurial psychological trait as it is antecedent of decision making process. TA channelizes creativity and innovation which are important facets of EO. He believed that higher TA is trademark of entrepreneurial managers than traditional managers. TA is related to high acceptance, experimentation and criticism. Mantok et al. (2019) found positive relationship between TA and EO. Kantur and İşeri-Say (2012) argued that OR can be used to augment impact of TA on organizational posture and orientation. Researchers also believe that TA is not a one-time phenomenon rather is created through human’s experience and continuous learning through cognitive power of the mind, through which person visualizes and perceives the happenings around them. Hence, it is posited that OR have moderating effect on this relationship.

**H1:** TA has positive impact on EO

**H2:** OR moderates the relationship between TA and EO

### **Need for Achievement (nAch)**

This concept is related to positive psychology and motivation. McClelland (1965) has highlighted that nAch is predictor for entrepreneurship which leads to the development of theory related of achievement motivation. Need for achievement can be viewed as “a tendency to choose and persist at activities that hold a moderate chance of success or a maximum opportunity of personal achievement satisfaction without the undue risk of failure” (McClelland, 1965). He mentioned that nAch is closely related to EO. The term has alternate connotation of “Achievement Motivation” where “motivation” can be taken as a prime drive for all our actions. This forms basis of our job related attitudes and behaviours, our eagerness for performance, which is resultant from inequality in our needs, desires and living. Achievement plays a very significant role in our lives and our ambitions. Miner et al. (1989) found psychological trait of nAch directly related to the firm’s expansion, progression and growth. Josien (2008); Mantok et al. (2019) found positive relationship between nAch and EO. Hartmann et al. (2022) conducted an empirical research in tourism SMEs and found nAch and OR are positively related. Hence it is posited that OR have moderating effect on this relationship.

**H3:** nAch has positive impact on EO

**H4:** OR moderates the relationship between nAch and EO

### **Internal Locus of Control (ILOC)**

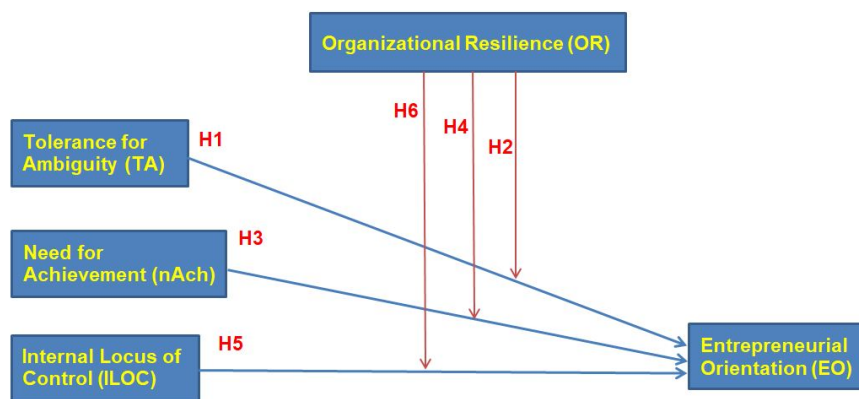
Rotter (1966) defined LOC as any person’s own perception about external and internal events governing and directing his life. Boone et al. (1996) defines LOC as beliefs a person has about happening in his life due to own decision making or by external influences including

chance, luck, opportunity, destiny etc. Researchers are of the view that LOC shifts from external to internal by increasing age or other demographic factors (Krehbiel, 2002). Researchers consent that LOC evolves and matures overtime through experiences and perceptions and strongly affects person's dealing or desire to deal with different situations. LOC may result in overall plunge or surge in the person's general life satisfaction and things related to him (Judge & Bono, 2001). LOC can be external (ELOC) or internal (ILOC). ILOC has strong effect on desire or need for change, the higher is ILOC the higher is desire for nAch (Brockhaus & Howtz, 1982). For writing the literature review of this paper, we have followed the guidelines provided in the previous research in the social science research (e.g., Luqman, Masood, Shahzad, Imran Rasheed, & Weng, 2020; Luqman, Masood, Weng, Ali, & Rasheed, 2020; Masood, Feng, Rasheed, Ali, & Gong, 2021; Moin, Omar, Ali, Rasheed, & Abdelmotaleb, 2022; Moin, Omar, Wei, Rasheed, & Hameed, 2021; Murtza & Rasheed, 2023; Naeem, Weng, Hameed, & Rasheed, 2020; Nand, Pitafi, Kanwal, Pitafi, & Rasheed, 2020; Nisar & Rasheed, 2020; Nisar, Rasheed, & Qiang, 2018; Rasheed, Malik, et al., 2020; Rasheed & Murtza, 2023; Rasheed, Okumus, Weng, Hameed, & Nawaz, 2020).

According to Alanazi and Rodrigues (2003) ILOC is one of the most relevant construct while a person's competency level is gauged. Many researchers found ILOC as an important entrepreneurial trait. Chadwick (1998, p. 17) found ILOC positively related to EO. Mantok et al. (2019) also quantitatively concluded that ILOC is directly related to the EO of the firm and employees as well. Aguila (2012) stressed that high ILOC means high EO. Alat et al. (2023) found ILOC and EO concepts closely related being moderated by OR in employees. It is posited the OR have moderating effect on this relationship.

**H5:** ILOC has positive impact on EO

**H6:** OR moderates the relationship between ILOC and EO



**Figure 1.** Theoretical Framework of Research

## Theoretical Considerations

Our research draws its underpinning from Resource Based View (RBV) that is sublimation of Organization theory. RBV is put forward by Barney (1991) who states that adequate utilization of organizational resources can lead to a sustainable advantage in form of slack resources which can be source of OR (Iborra et al., 2020). This research utilizes employees' psychological traits which are entrepreneurial in nature and contribute towards the EO of the organization; moreover, this relationship is being moderated by OR. This aspect needs utmost attention during selection / hiring process so as to get a competitive advantage and higher EO. Chen, Liu, et al. (2021) pleaded that combination of employee's psychological traits are

reflected in shape of EO of the organizations and more entrepreneurial the employees are the higher is EO of the organization. He also emphasized on need of higher EO in a competitive marketplace. Chen, Liu, et al. (2021) mentioned that OR is mainly driven from system resiliency theory which is part and parcel of HRO (high reliability organizations).

## Research Methodology

This research adopts quantitative approach to reach to empirical evidence for hypothesized research model. To accomplish stated objectives, KP Tourism department office located in Peshawar was approached for list of tourism SMEs operating in KPK province. Out of 0.5 million (approximately) tourism SMEs, this research targeted at acquiring data from 1000 SMEs through random selection to be a sizeable representation. Out of 994 questionnaire mailed only 620 questionnaire were returned showing a response rate of over 62%. On return, these questionnaires were coded in SPSS 23 in order to generate meaningful data, which were further analysed. Designing the method of this research study, we have followed all the guidelines provided in the previous research in the social science research (e.g., (Peng, Liang, Fatima, Wang, & Rasheed, 2023; Pitafi, Rasheed, Kanwal, & Ren, 2020; Rana, Gaur, Singh, Awan, & Rasheed, 2022; Rasheed, Aslam, & Sarwar, 2010; Rasheed, Hameed, Kaur, & Dhir, 2023; Rasheed, Humayon, Awan, & Ahmed, 2016; Rasheed, Jamad, Pitafi, & Iqbal, 2020; Saleem, Rasheed, Malik, & Okumus, 2021; Sarwar, Aslam, & Rasheed, 2010; Sarwar, Danyal Aslam, & Imran Rasheed, 2012; Umrani et al., 2022).

## Research Design

This research used survey research design to obtain primary data using questionnaire for recording of responses from managers of selected tourism SMEs. Instrument was questionnaire that was carefully designed in such a way that it assesses desired constructs through well-established adopted scales. A pilot study was conducted in November 2022 to check the reliability of instrument. Moreover, exploratory factor analysis (EFA) was conducted to check the applicability of instrument in Pakistani context. Result of pilot study and EFA both supported this research. After the collection of responses from managers of tourism SMEs, demographics and descriptive profile of the sample was followed by multiple linear regression (MLR) and evaluation of moderation effect by means of Andrew F. Hayes macro through SPSS software. Using Hayes Marco for moderation assessment is supported by the work of Aguinis (2004). Eshegheri and Korgba (2017) recommended using of MLR with Hayes process macro while performing moderation analysis for with TA, nAch, ILOC as independent variables and EO as dependent variable.

## Source of Data

Tourism SMEs were randomly selected from the list in KPK province. Randomization was done with Microsoft Excel's formula. The concept behind use of simple random sampling was the reach up to a conclusion that can be generalized to the complete population and can further be utilized in national and international context. 994 questionnaires were mailed to managers of selected tourism SMEs out of which 620 questionnaires were returned. After sifting of received questionnaire 591 questionnaire were found adequately filled and suitable for analysis.

- **Population**

Target population of this research was all tourism SMEs operating in KPK province. Population was selected due to continuous efforts of KP Tourism department in developing tourism destinations which have been receiving appreciations by the local and international

visitors. Complete list of tourism SMEs is being maintained at KP Tourism department that comprises of our population.

#### • **Sample Size Determination and Description**

As per the guidelines received through pilot study and meetings with tourism SME managers, a random sample from list of tourism SMEs was drawn on the basis of Knofczynski and Mundfrom (2008) tabular recommendations, which says that in case of 3 predictor variables in MLR if excellent prediction at decent significance value is required then sample size of at-least 1000 respondents, keeping in view 20% wastage rate is recommended. As primary data is gathered by mailing questionnaire to randomly selected managers keeping in consideration high non-response rate, 994 questionnaires were distributed and this research could get 591 completed questionnaires for analysis.

#### • **Scales & Measurement**

This research has used well-established borrowed scales for all the constructs. Further suitability of these measures has been confirmed by performing exploratory factor analysis (EFA) to see their relevance in the local context.

- EO was measured on an adopted scale developed and used to gauge EO of SMEs by Chadwick et al. (2008). The scale is valid, stable, relevant and reliable. It has 9 items to ascertain 3 underlying dimensions. First 3 items measure innovation, next 3 items measure proactive-ness and last 3 items measure risk-taking. Ranking is done on five-point Likert scale.
- TA was measured by 13- item scale developed by McLain (2009) named as MSTAT-II. The scale has been used frequently by researchers. Rating is done on 5 point likert scale. The scale has many seemingly similar statement and need high attention while responding.
- nAch was measured by adopted Ray's Achievement Motivation Scale (Ray, 1979). The scale contains 14-items that are rated on a five point Likert Scale. Certain items are reversed coded. For the sake of simplicity many researchers have very carefully transformed the reverse coded items into non-reverse coding items so that the measurement should be accurate. This scale has high validity, reliability and consistency as it is repeatedly used by researchers.
- ILOC by an adopted scale developed by Lachman (1983) named as 'Personality in intellectual (aging) context Inventory – Internal Scale', the scale has 12-items and is rated on five point Likert scale. The scale is widely used in research due to its high validity, reliability and consistency.
- OR has been measured by adapted scale developed by Orchiston et al. (2016) having 13 indicator item and used in tourism SMEs organizational resilience. The scale is robust, valid, reliable and consistent.

#### **Data Analysis Considerations**

Bennett (2000) recommended use of multiple linear regression to ascertain effect of moderating variable on the prediction of dependent variable. In our case OR is having moderating impact on the relationship of three major psychological traits viz. TA, nAch and ILOC on dependent variable i.e. EO. Eshegheri and Korgba (2017); Hartmann et al. (2022) studied effect of moderation of resilience on relationship between psychological traits and entrepreneurial orientation using SPSS with the help of descriptive statistics, correlations matrix and multiple linear regression. This research used Dr. Andrew Hayes plugin in SPSS 23 for incorporating moderation effect through already preset models. EFA was used though rotated component matrix through varimax rotation to see factor overloading of adopted



scales. Reliability tests of the research instruments were conducted in a pilot study on 39 tourism SMEs managers prior to administration of questionnaires to sample. Cronbach Alpha greater than 0.80 is considered as good while value above 0.90 is considered great. Values are given in Table 1.

Construct	Cronbach Alpha	No of Items
TA	0.791	13
nAch	0.878	14
ILOC	0.776	12
OR	0.871	13
EO	0.879	9

### Data Analysis and Results

The responses received from questionnaires were encoded in SPSS 23. Following results were obtained from the data analysis.

### Sample Demographics & Profiling

Out of 994 distributed questionnaires, only 620 questionnaires were returned. Before coding of the questionnaires they were screened for completion and missing values. Only 591 questionnaires were found adequately filled for analysis purpose. Demographics and important characteristics of the sample are summarized in Table 2.

	Frequency	Percentage
<b>Gender</b>		
Male	544	92.0
Female	47	7.9
<b>Marital Status</b>		
Single	472	80.30
Married	116	19.62
Widow / Divorced	3	0.50
<b>Age</b>		
20 – 25	35	5.92
26 – 30	443	74.95
31 – 35	40	6.76
36 – 40	37	6.26
> 40	36	6.09
<b>Education</b>		
Bachelors	425	71.91

Masters	166	28.08
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### Exploratory Factor Analysis (EFA)

In order to ensure the applicability of scales measuring different constructs in Pakistan, EFA was performed. This technique gives guideline in the research whether the used scales are applicable outside the country where they were prepared. Generally, EFA is conducted in the early stages of the research to ascertain that research will measure what it is intended to measure in specific demographics. The selection criterion for EFA was the value of 0.5, which suggests the retention of the particular item. Hair et al. (1998) suggested that values of factor loading less than 0.40 should be suppressed. Awang et al. (2016) and Maciel et al. (2013) used 0.5 as the cut-off value to include factor in EFA in their research. It has been observed that the factors were properly loaded against the items they should have loaded and cross-loading was not present in the data. **Table 3** presented the result of EFA of scales. A very distinctive loading of factor is observed as all the dimension have been measuring only the intended variables.

<b>Table 3. Exploratory Factor Analysis</b>					
<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
TA1				0.947	
TA2				0.792	
TA3				0.818	
TA4				0.835	
TA5				0.844	
TA6				0.865	
TA7				0.843	
TA8				0.856	
TA9				0.846	
TA10				0.840	
TA11				0.821	
TA12				0.834	
TA13				0.896	
NACH1		0.957			
NACH2		0.890			
NACH3		0.886			
NACH4		0.902			
NACH5		0.884			
NACH6		0.885			
NACH7		0.895			
NACH8		0.894			
NACH9		0.897			
NACH10		0.895			
NACH11		0.881			
NACH12		0.892			
NACH13		0.884			
NACH14		0.867			
ILOC1			0.960		
ILOC2			0.894		
ILOC3			0.898		
ILOC4			0.914		
ILOC5			0.901		

ILOC6			0.899		
ILOC7			0.905		
ILOC8			0.897		
ILOC9			0.911		
ILOC10			0.908		
ILOC11			0.897		
ILOC12			0.895		
OR1	0.862				
OR2	0.664				
OR3	0.699				
OR4	0.653				
OR5	0.692				
OR6	0.696				
OR7	0.710				
OR8	0.672				
OR9	0.683				
OR10	0.726				
OR11	0.696				
OR12	0.653				
OR13	0.692				
OR14	0.689				
OR15	0.652				
OR16	0.707				
OR17	0.692				
OR18	0.690				
OR19	0.692				
OR20	0.704				
OR21	0.697				
OR22	0.707				
OR23	0.689				
OR24	0.667				
OR25	0.695				
OR26	0.707				
OR27	0.671				
OR28	0.717				
OR29	0.679				
OR30	0.657				
OR31	0.701				
OR32	0.683				
OR33	0.698				
OR34	0.674				
EO1					0.589
EO2					0.622
EO3					0.625
EO4					0.615
EO5					0.592
EO6					0.561
EO7					0.530
EO8					0.500
EO9					0.513

### Checking Data for Assumptions of Normality

Before proceeding to regression analysis, five assumptions of normality were checked for data. These assumptions are the conditions to be checked for shape of distribution of data, presence of any extreme values, presence of linear pattern in data, uniform distribution of variance around regression line and shared prediction power of independent variables towards the dependent variable.

#### Normality of Data

Before running regression analysis on the data, there is a requirement to check data for the shape of distribution. The most ideal form of distribution will be bell-shaped. This shape of distribution is also helpful to ascertain whether some conditions may be applied to the data in order to make it normally distributed. Researchers pleaded that for a large data set, the shape of distribution will automatically be normal if data set is generated randomly and slight distortion in the shape does not violate the assumption.

This supports that sample size i.e. greater than 40 tends to be normal as the distribution is random. It is also believed that perfect normality does not exist at all, the closer is the data set to normal distribution, the easier is the analysis. Charts and graphs show the actual shape of distribution for a general idea. Initially the descriptive statistics of data including mean and standard deviation of all the constructs were taken. They are summarized in **Table 4** appended below.

Variables	Mean	Std Dev
TA	3.1305	.51603
NACH	3.0549	.98230
ILOC	3.0104	.99908
OR	3.1743	1.06412
EO	3.8100	.47661

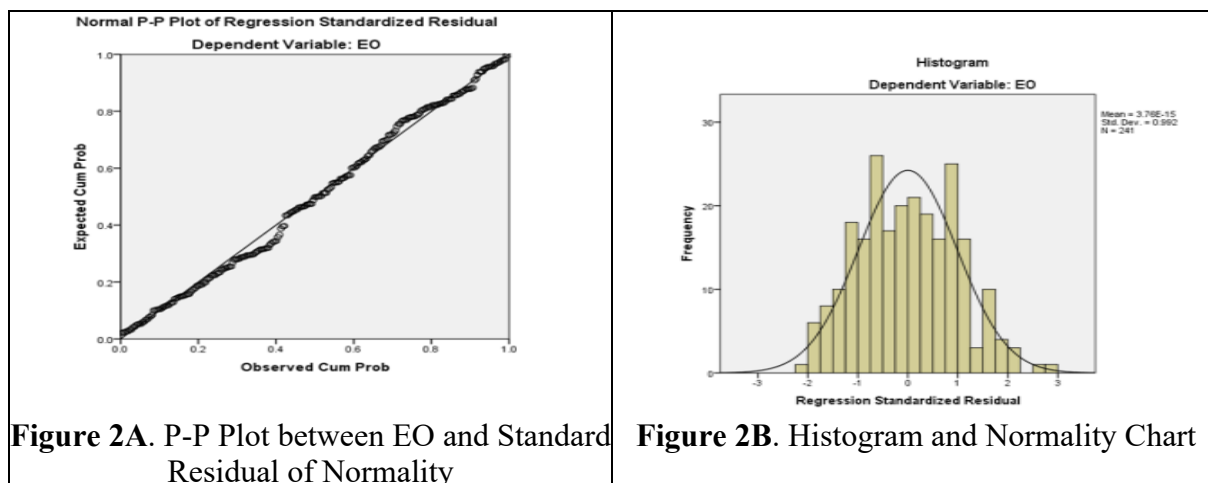
The data may be compared with the standard normal shape through P-P Plot and other normality test. The values of skewness and kurtosis guide us about the exact shape of the distribution and the degree of deviation from standard normality of the data. Value of skewness greater than 2 and value of kurtosis greater than 7 are considered absolutely non-linear. It is also assumed that value of skewness and kurtosis greater than 1.96 are considered as non-normal in nature.

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
TA	-0.371	0.157	-0.857	0.312
NACH	-0.129	0.157	-0.950	0.312
ILOC	-0.320	0.157	-0.965	0.312
OR	0.792	0.157	-1.233	0.312
EO	-0.958	0.157	0.048	0.312

**Table 5** above summarizes that all the variables are normally distributed. Moreover, the significance is also shown in Kolmogorov-Smirnov and Shapiro Wilk tests shown in **Table 6** that the data is normally distributed.

<b>Table 6. Kolmogorov-Smirnov &amp; Shapiro Wilk Test of Normality</b>				
<b>Variables</b>	<b>Kolmogorov-Smirnov</b>		<b>Shapiro-Wilk</b>	
	Statistic	Sig.	Statistic	Sig.
TA	.181	0.00	.924	0.00
NACH	.154	0.00	.936	0.00
ILOC	.165	0.00	.929	0.00
OR	.333	0.00	.740	0.00
EO	.255	0.00	.845	0.00

Next, P-P plots were made for dependent variable, which also confirms that the data set is normally distributed. It is graphically presented as **Figure 2A**. The P-P plot shown below suggested that our data is properly patterned and normally distributed. The data is plotted as a histogram for the shape and checking for the normality assumption. **Figure 2B** below suggests that data is adequately distributed and has a typical bell shape. A closer observation also reveals that there also exist balancing high values, and the dependent variables distribution is as per the standard normal probability plot.



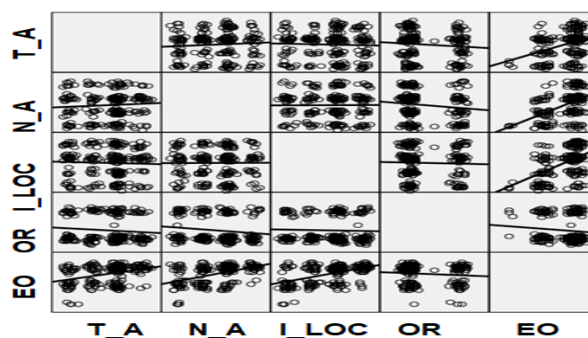
• **Checking for Outliers**

Outliers are the extreme values in the data that are attributed towards distortion in the shape of the distribution. At times the outliers indicate meaningful information i.e. wrong entries, error terms or significantly different result from the mean value. Box plots are used to check the outliers, which in our case are none, as we have the rating scale from 1 to 5 and all respondent’s response is within the limit of scales provided. In our data all the observations are perfectly presented into the admissible range and no outliers exist.

• **Linearity of Data**

This assumption checks the pattern of relationship among the dependent and independent variables. Hair et al. (1998) highlighted that linearity means that changes in the independent variables should bring proportionate change in the dependent variable in a linear manner. For a perfect dependence relationship, the degree of change in independent variable is expected to bring the linear change in the dependent variable. It implies when the dataset is plotted there should be a line pattern instead of curves. The better way to analyse these phenomena can be through the Scattered Plot Matrix. The matrix suggests that maximum relationship among the variables are linear in fashion, where the data vales are distributed evenly both over and under the line passing through the data. Looking in the last column of the matrix suggest that EO is positively associated with all three independent variables T\_A, N\_A, I\_LOC. Figure 3 show the linearity of data set.

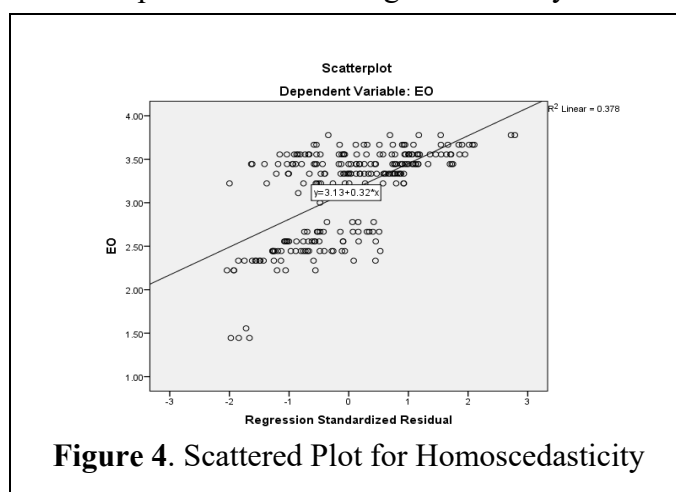
Jarque and Bera importance of data which is condition in relationship, where dependent variables the amount of called the



**Homoscedasticity**

(1980) stressed the homoscedasticity of defined as the dependence both independent and are equally affected by variance. This is also homogeneity of

variance. It is a desirable phenomenon. This assumption is directly related with the regression because it follows the central tendency theorem. In a data set, all of the time there remained the trade-off between the homoscedasticity and heteroscedasticity. This assumption can be checked in SPSS by plotting the dependence relationship in regression analysis against the residual variance as shown in the figure below. The dataset is fulfilling the homoscedasticity condition for normal distribution as the variance is equally divided in the relationship. In our data analysis we found that the distribution of variance was uniform, which suggests that there will not be any affect in the analysis due to the variance. **Figure 4** appended below shows a scattered plot where the data points reveal that dispersion of data is homogeneous both above and below the line passing through the data points. For analysis sake it is a highly desirable condition and we can proceed with the regression analysis.



**Figure 4. Scattered Plot for Homoscedasticity**

**Multicollinearity**

Multicollinearity refers to a condition in which the independent variable shares among themselves the explanatory power of dependent variables. This weakens the overall regression model in a way that standard error estimate is increased for specific regression analysis and its

coefficient. Variance inflation factor is checked to see the multicollinearity of the data. In case two variables are correlated the value of VIF is 1 and if they are highly correlated the value is 10. Hair et al. (1998) recommended a very small tolerance value of 0.10 and very large value of 10 which indicated high multicollinearity. VIF values near 1 are considered to be the best values. In our case all the values are near 1 meaning no multicollinearity exists. Table 7 appended below clearly indicate the values of VIF are ideal to proceed with the regression analysis as very little multicollinearity is present.

Variables	Collinearity Diagnostics	
	Tolerance	VIF
TA	.985	1.015
NACH	.977	1.024
ILOC	.997	1.003
OR	.972	1.029

### Correlation Analysis

The results of analysis are summarized in **Table 8**. The 2-tailed correlation analysis is being conducted at 95% CI. All our IVs are significantly related with the DV. There exists very minor relationship among the IVs which supports that in our case the multicollinearity is at the minimum. TA and nAch are loosely positively correlated with the value of 0.074. While TA and ILOC are positively correlated, the magnitude is also very small and insignificant. OR is also positively correlated with TA, NACH, and ILOC and their magnitude are insignificant. It is also visible that ILOC, NACH and TA have respective strength of the correlation with the DV. Correlation matrix also justify that IVs are significantly related to DV with the strength of relation between TA and EO to be 0.3711, between NACH and EO to be 0.494 and between ILOC and EO to be 0.503. The other values in the matrix show that multicollinearity does not exist in among the IVs of our model, which is a desired condition as well. OR being the moderating variable is also positively correlated with EO but the magnitude is not significant, but the value is considerable to be taken as the moderating variable. It is observed that predictor variables have less correlation among themselves, this supports the concept of multi-collinearity that there is negligible shared variance among the independent variables, moreover, the moderator variable also has the low level of correlation with both dependent and independent variables. As per our model the relationship of independent variable with dependent variable is significant.

Measures	TA	nAch	ILOC	OR	EO
TA	1				
NACH	0.074	1			
ILOC	0.039	0.006	1		
OR	0.101	0.092	0.085	1	
EO	0.3711**	0.494**	0.503**	0.109	1

### Regression Analysis

After passing through all the assumptions of normality successfully, regression analysis was conducted. **Table 9** summarized regression results without the moderator while **Table 10** is showing the regression results after application of OR as moderator. Without moderation

results display overall regression model fit with  $R = 0.788$ , this suggested that model is correctly explaining the dependence relationship with high accuracy and IVs are adequately connected with DV. The model is significant with acceptable underlying error as values of R-Square and Adjusted R-Sq are also robust and significant. All the IV of the model are significantly contributing towards the relationship. It is also noted that out of our three IVs, contribution of ILOC is the highest with NACH at second place and TA at the third place. OR being our moderator in the relationship has a positive moderation effect i.e. slight positive in nature. This implies that OR positively moderates this relationship as individually it has low contribution in the model.

Variables	EO				
	StdCoeff Beta	T Value	Lower Bound	Upper Bound	P VALUE
Constant	0.952	3.446	0.530	1.373	0.00
TA	0.359	2.892	0.147	0.230	0.00
NACH	0.468	2.542	0.200	0.283	0.00
ILOC	0.515	2.843	0.211	0.288	0.00
R	0.788				
R-Sq	0.622				
Adj R-Sq	0.615				
F	96.894				

Regression results after interaction of OR as moderator are summarized in **Table 11**. These results display overall regression model fit is increased by 0.086 and  $R = 0.874$ , this suggested that explanatory power of regression model is not only increased but is more robust than before. It is also noted that values are closer to those acquired in table 10 but R-Sq and Adj R-Sq at 0.622 and 0.615 respectively clearly depicts that model has been significantly improved. Moderated IVs are adequately connected with DV with almost similar magnitude with minor variation. The model is overall significant with acceptable underlying error as values of R-Square and Adjusted R-Sq are also robust and significant. All moderated IV i.e. TA\_OR, NACH\_OR and ILOC\_OR are significantly contributing towards the relationship. It is also noted that out of our three interaction terms, contribution of ILOC\_OR is the highest with NACH\_OR at second place and TA\_OR at the third place. This implies that OR positively moderates this relationship in combined manner.

Variables	EO				
	StdCoeff Beta	T Value	Lower Bound	Upper Bound	P VALUE
Constant	2.102	2.124	0.423	1.141	0.00
TA_OR	0.361	2.729	0.170	0.201	0.00
NACH_OR	0.409	2.428	0.199	0.288	0.00



ILOC_OR	0.488	2.777	0.252	0.293	0.00
R	0.874				
R-Sq	0.733				
Adj R-Sq	0.719				
F	98.484				

### Assessing effect of moderation by Hayes PROCESS Macro version 3.0

In our research, we have prime focus on assessing the effect of moderation on the dependence relationship and independent variables. We have hypothesized that OR casts a positive moderation effect on this relationship and individual IVs. In earlier section, we have already seen the results of regression analysis. Our model fit is at  $R=0.874$ . The p-value is 0.00 which shows that model is significant. After that we have used PROCESS Macro developed by renowned researcher Andrew F. Hayes. The macro has many pre-set models in it to check for moderation, mediation and many other effects. Model 1 denotes model for moderation that we have utilized in our reseach. The only issue with the PROCESS macro is that we have to take all the interactions separately for each IVs and conclude in wholesome manner. Taking every IV independently with our Moderator OR we look again on the model fit. If the explanation power of the model is increased by adding the effect of moderator then we can rightly conclude that positive moderation is found.

**Table 11** summarizes the results of interaction between TA x OR. By looking at value of  $R = 0.791$  and  $R-Sq = 0.699$  we have found the model to be significant having a lower p-value = 0.00. Alternatively, TA and OR are themselves significant and their Int (Moderation effect) is also significant. The result implies that TA when moderated by OR increases the overall explanatory power of model. And the model fit moves on a higher value, hence the moderation is positive and significant.

Variables	EO				
	StdCoeff Beta	T Value	Lower Bound	Upper Bound	P Value
Constant	3.383	3.112	1.763	5.004	0.00
TA	0.002	2.010	0.516	0.711	0.00
OR	0.220	3.032	0.103	0.290	0.00
Int	0.512	2.751	0.555	0.732	0.00
R	0.791				
R-Sq	0.699				
F	97.29				

Similarly Table 12 summarizes the results of interaction between NACH x OR. By looking at value of  $R = 0.871$ ,  $R-Sq = 0.712$  and  $p\text{-value}=0.00$  we have found that model is significant. Alternatively, NACH and OR are themselves significant and their Int (Moderation effect) is also significant having p-value 0.00. The result implies that NACH when moderated by OR increases the value of overall explanatory power of the model. Hence the overall model fit is increased. It depicts that the moderation is positive and significant. It is also observed that

moderated effect of NACH x OR is more robust in magnitude than the effect of TA, as positively improves the model far better than TA.

<b>Table 12.</b> Hayes Process Macro (NACH X OR)					
Variables	EO				
	StdCoeff Beta	T Value	Lower Bound	Upper Bound	P Value
Constant	2.647	2.579	1.190	4.104	0.00
NACH	0.1999	2.342	0.264	0.664	0.00
OR	0.072	2.383	0.146	0.301	0.00
Int	0.013	2.227	0.106	0.334	0.00
R	0.871				
R-Sq	0.712				
F2	98.11				

**Table 13** summarizes the results of interaction between ILOC x OR. By looking at value of R = 0.811, R-Sq = 0.709 and p-value 0.00. we have found the model to be significant. Alternatively, ILOC and OR are themselves significant and their Int (Moderation effect) is also significant having p-value 0.00.

<b>Table 13.</b> Hayes Process Macro (ILOC X OR)					
Variables	EO				
	StdCoeff Beta	T Value	Lower Bound	Upper Bound	P Value
Constant	3.199	2.722	1.776	4.621	0.00
ILOC	0.084	2.393	.136	0.5046	0.00
OR	0.118	2.385	.084	0.347	0.00
Int	0.241	2.748	.067	0.199	0.00
R	0.811				
R-Sq	0.709				
F	98.94				

The result implies that ILOC when moderated by OR increases the overall explanatory power of model, hence it increases the value of model fit. The moderation is positive and significant. It is also observed that moderated effect of ILOC x OR is more robust in magnitude than the effect of TA and less robust than NACH, as positively improves the model far better than TA.

### Findings of the Research

There are many findings of this research. Firstly, relationship of psychological traits (TA, nAch& ILOC) with EO was found significant. Moreover, through Hayes process macro the impact of OR's moderation over the relationship was established too. So in service industry like tourism our hypothesis from H1 to H6 were tested and confirmed. In generic terms, OR is the organizational propensity to withstand environmental shocks and survive despite worst of conditions. This is only possible if employees of organizations possess resilience in their

psychological traits and organization asserts itself in terms of entrepreneurial orientation. It is also found that ILOC, NACH and TA are high to low traits contributing in EO thereof. Overall, our findings are aligned with the findings of the research published in the social sciences (e.g., Hong, Rasheed, Sigala, & Ahmad, 2023; Wang, Azam, Murtza, Shaikh, & Rasheed, 2023; Weng, Rasheed, & Yue, 2020; Yousaf, Humayon, Rasheed, Ahmed, & Danish, 2014; Yousaf, Rasheed, Hameed, & Luqman, 2020; Yousaf, Rasheed, Kaur, Islam, & Dhir, 2022; Zhang, Rasheed, & Luqman, 2020; Zhang, Wu, & Rasheed, 2020).

## Discussion on Results

Table 1 shows reliability results of our borrowed scales. These scales are used in developing research instrument. After the test for normality and the conditions thereto, regression analysis was conducted. Firstly the regression analysis without moderator was followed by regression analysis with moderator. Result of regression analysis supported that our IVs and DV are adequately connected through the relationship we hypothesized through our conceptual model and the overall regression model fit increases when we moderate our IVs. Table 10 summarizes the results of regression analysis without Moderator. Value of regression model fit is  $R = 0.788$ . This value defines the explanatory power of the model, which is quite robust. All the IVs are significant with  $p\text{-value} = 0.00$ . As a general rule if the  $p\text{-value}$  exceeds the  $(1 - \text{level of confidence}) / 2$  the relationship is not significant and we have to accept the Null hypothesis that no significant difference exists. In our case all the  $p\text{-values}$  are 0.00 which indicated that all the IVs are significant in the relationship and cannot be omitted. The standardized beta coefficient explains the variance in DVs that cause 1 unit change in DV. Coefficient of constant 0.952 depicts that in absence of all 3 IVs the value of DV will be set to the constant value. 1 unit change in DVs can be explained by inclusion of TA having slope 0.359, with inclusion of NACH having slope 0.468 and ILOC having slope 0.515. ILOC has more positive contribution in the model than NACH and TA. Value of  $R\text{-Sq}$  and  $\text{Adj } R\text{ Sq}$  are also robust in case of our regression analysis. The  $t\text{-values}$  follow the 2-t rule and do not exceed the value of 2.88. The LBound and UBound of 95 % confidence interval can also be checked to see whether any IV is significant or not. In the table, we have observed that 0 does not come in the confidence interval, which clearly means that IV is significant.

## Conclusion & Recommendation

Major takeaways of this research are both from organizational and industrial perspective. We know that employees are backbone of any organization where their psychological makeup directly shapes their workplace behaviour and job related attitudes. This relevancy further increases when employees' attitudes collectively make EO which is a market phenomenon. We cannot think of the complete picture without connecting individual level psychological traits and EO which is a determinant of organizational performance. It is said "entrepreneurialism is contagious", it is spread through conducive learning environment and reflected in the overall organizational posture. We have found in our research that this relationship is regulated and moderated in presence of OR this is a vital ingredient for survival and maintainability of any organization. Need-based focused training and development can render employees as precious resource for the organization and source of sustainable competitive advantage in a competitive marketplace. Some of the pertinent recommendations in light of findings and conclusion of our research are :-

- Analysis of psychological makeup of prospective employees should be made mandatory in recruitment and selection process of organizations operating in highly competitive sector of the economy.

- A robust on-boarding program for employees is an essential requirement for their long term retention
- Continual training and development programs should be a permanent feature to nourish entrepreneurialism.
- Adequate reward system need to be in place to augment employee's commitment.
- Presence of proven dimensions of ORs is a pre-requisite for regulating EO.

### Limitations and Direction for Future Research

Data was gathered from only one major city of Pakistan. A more inclusive study will collect the data at national level or international level. A city to city comparative study is also proposed from a European context. The research model was limited to three main constructs, whereas emerging constructs can also be included in future studies like entrepreneurial leadership, PsyCap, innovation orientation, ambidexterity and strategic consistency and flexibility. Similar study can be expanded to include organizational performance.

Our research was context specific as we focused on tourism SMEs. Future studies may explore other types SMEs and other sectors of economy. The industry may also be changed to large manufacturing enterprises, joint stock firms or partnership firms. Different dimensions of OR can be separately tested for empirical evidence on relationship of psychological traits and EO. More meaningful results may be obtained if sample size is increased to 700 employees. In our study we did not separate managerial and non-managerial cadre. A qualitative study may be conducted on HRM managers to find their views on deterioration of training and development standards in the organizations with reference to OR and employee's psychological traits.

### References

- Aguila, H. (2012). *The Use of an Internal Locus of Control Scale as a Predictor of Exercise Adherence in Children Ages 6--12*. Arizona State University.
- Aguinis, H. (2004). *Regression analysis for categorical moderators*. Guilford Press.
- Alam, S. S. (2011). Entrepreneur's traits and firm innovation capability: an empirical study in Malaysia. *Asian Journal of Technology Innovation*, 19(1), 53-66.
- Alanazi, F. M., & Rodrigues, A. (2003). Power bases and attribution in three cultures. *The Journal of Social Psychology*, 143(3), 375-395.
- Alat, P., Das, S. S., Arora, A., & Jha, A. K. (2023). Mental health during COVID-19 lockdown in India: Role of psychological capital and internal locus of control. *Current psychology*, 42(3), 1923-1935.
- Altınay, L., Madanoğlu, M., De Vita, G., Araslı, H., & Ekinçi, Y. (2015). The interface between organizational learning capability, entrepreneurial orientation, and SME growth. *Journal of Small Business Management*.
- Arshad, M. I., Iqbal, M. A., & Shahbaz, M. (2018). Pakistan tourism industry and challenges: a review. *Asia Pacific Journal of Tourism Research*, 23(2), 121-132. <https://doi.org/10.1080/10941665.2017.1410192>
- Awang, Z., Afthanorhan, A., Mohamad, M., & Asri, I. (2016). *An evaluation of measurement model for medical tourism research: The confirmatory factor analysis approach* (Vol. 6). <https://doi.org/10.1504/IJTP.2015.075141>
- Ahmed, H., Nawaz, S., & Rasheed, M. I. (2019). Self-efficacy, self-esteem, and career success: the role of perceived employability. *Journal of Management Sciences*, 6(2), 18-32.

- Anser, M. K., Yousaf, Z., Yasir, M., Sharif, M., Nasir, M. H., Rasheed, M. I., . . . Majid, A. (2022). How to unleash innovative work behavior of SMEs' workers through knowledge sharing? Accessing functional flexibility as a mediator. *European Journal of Innovation Management*, 25(1), 233-248.
- Anser, M. K., Zaigham, G. H. K., Imran Rasheed, M., Pitafi, A. H., Iqbal, J., & Luqman, A. (2020). Social media usage and individuals' intentions toward adopting Bitcoin: The role of the theory of planned behavior and perceived risk. *International journal of communication systems*, 33(17), e4590.
- Baporikar, N. (2017). *Knowledge integration strategies for entrepreneurship and sustainability*. IGI Global.
- Basco, R., Hernández-Perlines, F., & Rodríguez-García, M. (2020). The effect of entrepreneurial orientation on firm performance: A multigroup analysis comparing China, Mexico, and Spain. *Journal of Business Research*, 113, 409-421.
- Bearse, P. J. (1982). A study of entrepreneurship by region and SMSA size. *Frontiers of entrepreneurship research*, 2, 78-112.
- Bennett, J. A. (2000). Mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing & Health*, 23(5), 415-420. [https://doi.org/10.1002/1098-240X\(200010\)23:5<415::AID-NUR8>3.0.CO;2-H](https://doi.org/10.1002/1098-240X(200010)23:5<415::AID-NUR8>3.0.CO;2-H)
- Bhatti, A., Rehman, S. U., & Rumman, J. B. A. (2020). Organizational capabilities mediates between organizational culture, entrepreneurial orientation, and organizational performance of SMEs in Pakistan. *Entrepreneurial Business and Economics Review*, 8(4), 85-103.
- Boone, C., Brabander, B., & Witteloostuijn, A. (1996). CEO locus of control and small firm performance: An integrative framework and empirical test. *Journal of management studies*, 33(5), 667-700.
- Bouaziz, F., & Smaoui Hachicha, Z. (2018). Strategic human resource management practices and organizational resilience. *Journal of Management Development*, 37(7), 537-551.
- Brockhaus, R. H., & Howtz, P. (1982). The psychology of the entrepreneur. CA Kent, DL Sexton, and KG Vesper, eds. *The Encyclopedia of Entrepreneurship*. In: Prentice Hall, Englewood Cliffs, NJ.
- Budner, S. (1962). Intolerance of ambiguity as a personality variable. *Journal of personality*.
- Burhan, M., Swailes, S., Hameed, Z., & Ali, I. (2020). HRM formality differences in Pakistani SMEs: a three-sector comparative study. *Employee Relations: The International Journal*. <https://doi.org/10.1108/er-11-2019-0440>
- Chadwick, K., Barnett, T., & Dwyer, S. (2008). An empirical analysis of the entrepreneurial orientation scale. *Journal of Applied Management and Entrepreneurship*, 13(4), 64.
- Chadwick, K. H. (1998). *An empirical analysis of the relationships among entrepreneurial orientation, organizational culture and firm performance* [Louisiana Tech University].
- Chen, R., Liu, Y., & Zhou, F. (2021). Turning danger into safety: The origin, Research context and theoretical framework of organizational resilience. *IEEE Access*, 9, 48899-48913. <https://doi.org/10.1109/access.2021.3069301>
- Chen, R., Xie, Y., & Liu, Y. (2021). Defining, Conceptualizing, And measuring organizational resilience: A multiple case study. *Sustainability*, 13(5), 2517. <https://doi.org/10.3390/su13052517>
- Chang, Y.-S., Yue, Z., Qureshi, M., Rasheed, M. I., Wu, S., & Peng, M. Y.-P. (2022). Residents' waste mobile recycling planned behavior model: the role of environmental concern and risk perception. *International Journal of Emerging Markets*(ahead-of-print).

- Hong, S., Rasheed, M. I., Sigala, M., & Ahmad, M. (2023). Is there a bright side of COVID-19? The influence of conscientiousness and extended TPB on the tourists' eco-friendly behaviour. *Current issues in Tourism*, 1-5.
- Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. *Entrepreneurship theory and practice*, 36(4), 677-702.
- Drucker, P. (2014). *Innovation and entrepreneurship*. Routledge.
- Eshegheri, A. E., & Korgba, F. (2017). Entrepreneurial orientation and resilience of medium scale businesses in Nigeria. *European Journal of Business and Management*, 9(35), 7-12.
- Ferreira, J., Cardim, S., & Coelho, A. (2021). Dynamic capabilities and mediating effects of innovation on the competitive advantage and firm's performance: The moderating role of organizational learning capability. *Journal of the Knowledge Economy*, 12, 620-644.
- Gugnani, R. (2022). Assessing the Moderating Impact of Self-Efficacy on Locus of Control and Individual Entrepreneurship Orientation Relationship. *FIIB Business Review*, 23197145221088642.
- Gulzar, M. A., Ahmad, M., Hassan, M., & Rasheed, M. I. (2022). How social media use is related to student engagement and creativity: investigating through the lens of intrinsic motivation. *Behaviour & Information Technology*, 41(11), 2283-2293.
- Hameed, Z., Khan, I. U., Sheikh, Z., Islam, T., Rasheed, M. I., & Naeem, R. M. (2019). Organizational justice and knowledge sharing behavior: The role of psychological ownership and perceived organizational support. *Personnel Review*, 48(3), 748-773.
- Hameed, Z., Muhammad Naeem, R., Rasheed, M. I., & Moin, F. (2023). *How does Leadership Transform Saudi SMEs Into Green Firms? The Role of Ethical Leadership, Green HRM*. Paper presented at the Academy of Management Proceedings.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis* (Vol. 5). Prentice hall Upper Saddle River, NJ.
- Hamel, G., & Välikangas, L. (2003). Strategic resilience. *UKexcellence June*, 6-9. <https://doi.org/10.1057/9781137294678.0738>
- Hartmann, S., Backmann, J., Newman, A., Brykman, K. M., & Pidduck, R. J. (2022). Psychological resilience of entrepreneurs: A review and agenda for future research. *Journal of Small Business Management*, 60(5), 1041-1079.
- Hillmann, J., & Guenther, E. (2021). Organizational resilience: a valuable construct for management research? *International Journal of Management Reviews*, 23(1), 7-44. <https://doi.org/10.1111/ijmr.12239>
- Iborra, M., Safón, V., & Dolz, C. (2020). What explains the resilience of SMEs? Ambidexterity capability and strategic consistency. *Long Range Planning*, 53(6), 101947. <https://doi.org/10.1016/j.lrp.2019.101947>
- Ireland, R. D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship theory and practice*, 33(1), 19-46.
- Iqbal, J., Yu, D., Zubair, M., Rasheed, M. I., Khizar, H. M. U., & Imran, M. (2021). Health consciousness, food safety concern, and consumer purchase intentions toward organic food: The role of consumer involvement and ecological motives. *Sage Open*, 11(2), 21582440211015727.
- Jarque, C. M., & Bera, A. K. (1980). Efficient tests for normality, homoscedasticity and serial independence of regression residuals. *Economics letters*, 6(3), 255-259.
- Josien, L. S. (2008). *Antecedents of entrepreneurial orientation: A contingency approach*. ProQuest.

- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of applied psychology*, 86(1), 80.
- Kanwal, S., Pitafi, A. H., Rasheed, M. I., Pitafi, A., & Iqbal, J. (2022). Assessment of residents' perceptions and support toward development projects: A study of the China–Pakistan Economic Corridor. *The Social Science Journal*, 59(1), 102-118.
- Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A., & Ren, M. (2020). Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tourism Management*, 77, 104014.
- Khalid, J., Weng, Q. D., Luqman, A., Rasheed, M. I., & Hina, M. (2022). After-hours work-related technology use and individuals' deviance: the role of other-initiated versus self-initiated interruptions. *Information Technology & People*, 35(7), 1955-1979.
- Khalid, J., Weng, Q. D., Luqman, A., Rasheed, M. I., & Hina, M. (2023). After-hours work-related technology use and individuals' deviance: the role of interruption overload, psychological transition and task closure. *Kybernetes*, 52(1), 158-181.
- Khan, S. U., Liu, X., Khan, I. U., Liu, C., & Rasheed, M. I. (2020). Assessing the investors' acceptance of electronic stock trading in a developing country: the Mediating role of perceived risk dimensions. *Information Resources Management Journal (IRMJ)*, 33(1), 59-82.
- Khizar, H. M. U., Iqbal, M. J., & Rasheed, M. I. (2021). Business orientation and sustainable development: A systematic review of sustainability orientation literature and future research avenues. *Sustainable Development*, 29(5), 1001-1017.
- Kantur, D., & İşeri-Say, A. (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management & Organization*, 18(6), 762-773.
- Khalique, M., Hina, K., Ramayah, T., & bin Shaari, J. A. N. (2020). Intellectual capital in tourism SMEs in Azad Jammu and Kashmir, Pakistan. *Journal of Intellectual Capital*. <https://doi.org/10.1108/jic-11-2018-0206>
- Knofczynski, G. T., & Mundfrom, D. (2008). Sample sizes when using multiple linear regression for prediction. *Educational and Psychological Measurement*, 68(3), 431-442.
- Koenig, M., Schlaegel, C., & Gunkel, M. (2013). ENTREPRENEURIAL TRAITS, ENTREPRENEURIAL ORIENTATION, AND INNOVATION IN THE PERFORMANCE OF OWNER-MANAGER LED FIRMS: A META-ANALYSIS (SUMMARY). *Frontiers of Entrepreneurship Research*, 33(4), 9.
- Krehbiel, M. A. (2002). *The Structure of Intellectual Functioning and Its Relationship to Perceived Control in a Clinical Sample of Adults with Cognitive Complaints*.
- Lachman, M. E. (1983). Perceptions of intellectual aging: Antecedent or consequence of intellectual functioning? *Developmental Psychology*, 19(4), 482.
- Leonelli, S., Masciarelli, F., & Fontana, F. (2022). The impact of personality traits and abilities on entrepreneurial orientation in SMEs. *Journal of Small Business & Entrepreneurship*, 34(3), 269-294.
- Liao, S.-H., Chen, C.-C., Hu, D.-C., Chung, Y.-c., & Yang, M.-J. (2017). Developing a sustainable competitive advantage: absorptive capacity, knowledge transfer and organizational learning. *The Journal of Technology Transfer*, 42(6), 1431-1450.
- Luqman, A., Masood, A., Shahzad, F., Imran Rasheed, M., & Weng, Q. (2020). Enterprise social media and cyber-slacking: an integrated perspective. *International Journal of Human–Computer Interaction*, 36(15), 1426-1436.

- Luqman, A., Masood, A., Weng, Q., Ali, A., & Rasheed, M. I. (2020). Linking excessive SNS use, technological friction, strain, and discontinuance: the moderating role of guilt. *Information Systems Management*, 37(2), 94-112.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Maciel, E. d. S., Savay-da-Silva, L. K., Vasconcelos, J. S., Galvão, J. A., Sonati, J. G., Silva, D. d., & Oetterer, M. (2013). Application of exploratory factor analysis to assess fish consumption in a university community. *Food Science and Technology (Campinas)*, 33(1), 99-106.
- Mantok, S., Sekhon, H., Sahi, G. K., & Jones, P. (2019). Entrepreneurial orientation and the mediating role of organisational learning amongst Indian S-SMEs. *Journal of Small Business and Enterprise Development*, 26(5), 641-660.
- McClelland, D. C. (1965). N achievement and entrepreneurship: A longitudinal study. *Journal of personality and Social Psychology*, 1(4), 389.
- McGregor, D., & Cutchler-Gershenfeld, J. (1960). *The human side of enterprise* (Vol. 21). McGraw-Hill New York.
- McLain, D. L. (2009). Evidence of the Properties of an Ambiguity Tolerance Measure: The Multiple Stimulus Types Ambiguity Tolerance Scale-II (MSTAT-II). *Psychological reports*, 105(3), 975-988.
- Miner, J. B., Smith, N. R., & Bracker, J. S. (1989). Role of entrepreneurial task motivation in the growth of technologically innovative firms. *Journal of applied psychology*, 74(4), 554.
- Mintzberg, H. (1973). Strategy-making in three modes. *California management review*, 16(2), 44-53.
- Masood, A., Feng, Y., Rasheed, M. I., Ali, A., & Gong, M. (2021). Smartphone-based social networking sites and intention to quit: self-regulatory perspective. *Behaviour & Information Technology*, 40(11), 1055-1071.
- Moin, M. F., Omar, M. K., Ali, A., Rasheed, M. I., & Abdelmotaleb, M. (2022). A moderated mediation model of knowledge hiding. *The Service Industries Journal*, 1-13.
- Moin, M. F., Omar, M. K., Wei, F., Rasheed, M. I., & Hameed, Z. (2021). Green HRM and psychological safety: How transformational leadership drives follower's job satisfaction. *Current issues in Tourism*, 24(16), 2269-2277.
- Murtza, M. H., & Rasheed, M. I. (2023). The dark side of competitive psychological climate: exploring the role of workplace envy. *Journal of Hospitality and Tourism Insights*, 6(3), 1400-1418.
- Naeem, R. M., Weng, Q., Hameed, Z., & Rasheed, M. I. (2020). Ethical leadership and work engagement: A moderated mediation model. *Ethics & Behavior*, 30(1), 63-82.
- Nand, S., Pitafi, A. H., Kanwal, S., Pitafi, A., & Rasheed, M. I. (2020). Understanding the academic learning of university students using smartphone: Evidence from Pakistan. *Journal of Public Affairs*, 20(1), e1976.
- Nisar, S. K., & Rasheed, M. I. (2020). Stress and performance: Investigating relationship between occupational stress, career satisfaction, and job performance of police employees. *Journal of Public Affairs*, 20(1), e1986.
- Nisar, S. K., Rasheed, M. I., & Qiang, W. (2018). They can't safeguard you when they are under stress: An exploratory study on issues and problems of job stress in police. *International Journal of Police Science & Management*, 20(2), 124-133.
- Nakku, V. B., Agbola, F. W., Miles, M. P., & Mahmood, A. (2020). The interrelationship between SME government support programs, entrepreneurial orientation, and performance: A developing economy perspective. *Journal of Small Business Management*, 58(1), 2-31.



- Norton, R. W. (1975). Measurement of ambiguity tolerance. *Journal of personality assessment*, 39(6), 607-619.
- Okhominina, D. (2010). Entrepreneurial orientation and psychological traits: the moderating influence of supportive environment. *Journal of Behavioral Studies in Business*, 2, 1.
- Onağ, A. O., Tepeci, M., & Başalp, A. A. (2014). Organizational Learning Capability and its Impact on Firm Innovativeness. *Procedia - Social and Behavioral Sciences*, 150, 708-717. <https://doi.org/http://dx.doi.org/10.1016/j.sbspro.2014.09.029>
- Onwe, C. C., Ogbo, A., & Ameh, A. A. (2020). Entrepreneurial orientation and small firm performance: The moderating role of environmental hostility. *Entrepreneurial Business and Economics Review*, 8(4), 67-84.
- Orchiston, C., Prayag, G., & Brown, C. (2016). Organizational resilience in the tourism sector. *Annals of Tourism Research*, 56, 145-148. <https://doi.org/10.1016/j.annals.2015.11.002>
- Palmer, C., Niemand, T., Stöckmann, C., Kraus, S., & Kailer, N. (2019). The interplay of entrepreneurial orientation and psychological traits in explaining firm performance. *Journal of Business Research*, 94, 183-194.
- Peng, M. Y. P., Liang, Z., Fatima, I., Wang, Q., & Rasheed, M. I. (2023). The nexus between empowering leadership, job engagement and employee creativity: role of creative self-efficacy in the hospitality industry. *Kybernetes*.
- Pitafi, A. H., Rasheed, M. I., Kanwal, S., & Ren, M. (2020). Employee agility and enterprise social media: The Role of IT proficiency and work expertise. *Technology in Society*, 63, 101333.
- Rana, J., Gaur, L., Singh, G., Awan, U., & Rasheed, M. I. (2022). Reinforcing customer journey through artificial intelligence: a review and research agenda. *International Journal of Emerging Markets*, 17(7), 1738-1758.
- Rasheed, M. I., Aslam, H. D., & Sarwar, S. (2010). Motivational issues for teachers in higher education: A critical case of IUB. *Journal of management research*, 2(2), 1.
- Rasheed, M. I., Hameed, Z., Kaur, P., & Dhir, A. (2023). Too sleepy to be innovative? Ethical leadership and employee service innovation behavior: A dual-path model moderated by sleep quality. *Human Relations*, 00187267231163040.
- Rasheed, M. I., Humayon, A. A., Awan, U., & Ahmed, A. u. D. (2016). Factors affecting teachers' motivation: An HRM challenge for public sector higher educational institutions of Pakistan (HEIs). *International Journal of Educational Management*, 30(1), 101-114.
- Rasheed, M. I., Jamad, W. N., Pitafi, A. H., & Iqbal, S. M. J. (2020). Perceived compensation fairness, job design, and employee motivation: The mediating role of working environment. *South Asian Journal of Management*, 14(2), 229-246.
- Rasheed, M. I., Malik, M. J., Pitafi, A. H., Iqbal, J., Anser, M. K., & Abbas, M. (2020). Usage of social media, student engagement, and creativity: The role of knowledge sharing behavior and cyberbullying. *Computers & Education*, 159, 104002.
- Rasheed, M. I., & Murtza, M. H. (2023). *Dark Side of Competitive Psychological Climate: The Role of Workplace Envy and Trait Self-Esteem*. Paper presented at the Academy of Management Proceedings.
- Rasheed, M. I., Okumus, F., Weng, Q., Hameed, Z., & Nawaz, M. S. (2020). Career adaptability and employee turnover intentions: The role of perceived career opportunities and orientation to happiness in the hospitality industry. *Journal of hospitality and tourism management*, 44, 98-107.
- Rasheed, M. I., Pitafi, A. H., Mishra, S., & Chotia, V. (2023). When and how ESM affects creativity: The role of communication visibility and employee agility in a cross-cultural setting. *Technological Forecasting and Social Change*, 194, 122717.

- Rasheed, M. I., & Weng, Q. (2019). *How to maintain career adaptability under abusive supervisor? The role of coworker support*. Paper presented at the academy of management proceedings.
- Rasheed, M. I., Weng, Q., Umrani, W. A., & Moin, M. F. (2021). Abusive supervision and career adaptability: The role of self-efficacy and coworker support. *Human Performance, 34*(4), 239-256.
- Rasheed, M. I., Yousaf, H. D. A. S., & Noor, A. (2011). A critical analysis of performance appraisal system for teachers in public sector universities of Pakistan: A case study of the Islamia University of Bahawalpur (IUB). *African journal of business management, 5*(9), 3735.
- Ray, J. J. (1979). A quick measure of achievement motivation—validated in Australia and reliable in Britain and South Africa. *Australian Psychologist, 14*(3), 337-344.
- Rodríguez-Sánchez, A., Guinot, J., Chiva, R., & López-Cabrales, Á. (2021). How to emerge stronger: Antecedents and consequences of organizational resilience. *Journal of Management & Organization, 27*(3), 442-459. <https://doi.org/10.1017/jmo.2019.5>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied, 80*(1), 1.
- Saleem, S., Rasheed, M. I., Malik, M., & Okumus, F. (2021). Employee-fit and turnover intentions: The role of job engagement and psychological contract violation in the hospitality industry. *Journal of hospitality and tourism management, 49*, 385-395.
- Sarwar, S., Aslam, H. D., & Rasheed, M. I. (2010). Hindering Factors of Beginning Teachers' High Performance in Higher Education Pakistan (Case Study of IUB-The Islamia University of Bahawalpur). *International Journal of Education, 2*(1), 1.
- Sarwar, S., Danyal Aslam, H., & Imran Rasheed, M. (2012). Hindering factors of beginning teachers' high performance in higher education Pakistan: Case study of IUB. *International Journal of Educational Management, 26*(1), 27-38.
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (Vol. 55). Transaction publishers.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. (1981). Threat rigidity effects in organizational behavior: A multilevel analysis. *Administrative science quarterly, 50*(1), 501-524. <https://doi.org/10.2307/2392337>
- Tibay, V., Miller, J., Chang-Richards, A. Y., Egbelakin, T., Seville, E., & Wilkinson, S. (2018). Business resilience: A study of Auckland hospitality sector. *Procedia Engineering, 212*, 1217-1224.
- Umrani, W. A., Ahmad, I., Rasheed, M. I., Ahmed, U., Pahi, M. H., Jhatial, A., & Abbsai, G. A. (2022). Managing intellectual capital: role of corporate entrepreneurship and absorptive capacity on firm performance. *Knowledge Management Research & Practice, 20*(5), 719-731.
- Ullah, N., Zada, S., Siddique, M. A., Hu, Y., Han, H., Vega-Muñoz, A., & Salazar-Sepúlveda, G. (2021). Driving Factors of the Health and Wellness Tourism Industry: A Sharing Economy Perspective Evidence from KPK Pakistan. *Sustainability, 13*(23), 13344.
- Wales, W. J., Gupta, V. K., & Mousa, F.-T. (2013). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal, 31*(4), 357-383.
- Xia, Q., Xie, Y., Hu, S., & Song, J. (2022). Exploring how entrepreneurial orientation improve firm resilience in digital era: findings from sequential mediation and FsQCA. *European Journal of Innovation Management.*
- Wang, Q., Azam, S., Murtza, M. H., Shaikh, J. M., & Rasheed, M. I. (2023). Social media addiction and employee sleep: implications for performance and wellbeing in the hospitality industry. *Kybernetes.*

- Weng, Q., Rasheed, M. I., & Yue, Z. (2020). *Proactive Personality and Organizational Career Growth: When and Why Proactive Individuals Stand Out*. Paper presented at the Academy of Management Proceedings.
- Yousaf, S., Humayon, A. A., Rasheed, M. I., Ahmed, H. M., & Danish, R. Q. (2014). Factors affecting retention of female employees in organizations. *Journal of Basic and Applied Scientific Research*, 4(7), 1-9.
- Yousaf, S., Rasheed, M. I., Hameed, Z., & Luqman, A. (2020). Occupational stress and its outcomes: the role of work-social support in the hospitality industry. *Personnel Review*, 49(3), 755-773.
- Yousaf, S., Rasheed, M. I., Kaur, P., Islam, N., & Dhir, A. (2022). The dark side of phubbing in the workplace: Investigating the role of intrinsic motivation and the use of enterprise social media (ESM) in a cross-cultural setting. *Journal of Business Research*, 143, 81-93.
- Zhang, Y., Rasheed, M. I., & Luqman, A. (2020). Work–family conflict and turnover intentions among Chinese nurses: The combined role of job and life satisfaction and perceived supervisor support. *Personnel Review*, 49(5), 1140-1156.
- Zhang, Y., Wu, S., & Rasheed, M. I. (2020). Conscientiousness and smartphone recycling intention: The moderating effect of risk perception. *Waste Management*, 101, 116-125.