Effect of Leader-Member Exchange Relationship on Occupational Stress in the Energy Sector of Pakistan: A Mediating Role of Job Involvement

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Effect of Leader-Member Exchange Relationship on Occupational Stress in the Energy Sector of Pakistan: A Mediating Role of Job Involvement

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Abstract: *The relationship between leader-member exchange (LMX) and occupational stress has gained substantial attention in recent years. The objective of this study is two folds: a) to analyze the impact of LMX on occupational stress; and b) to investigate whether job involvement mediates the positive relationship between LMX and occupational stress. A useable sample of 342 responses is drawn from a leading multinational engineering company of the energy sector in Pakistan. LMX is measured by four dimensions i.e. affect, loyalty, perceived contribution and professional respect, whereas three dimensions are used to measure occupational stress i.e. personal resources, personal strain and occupational role. A measurement model is constructed with high validity and reliability. Following a segmentation approach, four hypotheses are tested using latent variable scores (LVS) through a variance-based partial least square structural equation modelling (PLS-SEM) technique. The findings suggest that a) LMX shows a significant but on contrary to our expectation, a positive effect on occupational stress; b) LMX has no statistically significant effect on job involvement; c) job involvement has significant positive effect on occupational stress; however, d) job involvement does not mediate the relationship between LMX and occupational stress. The significant original contribution of this study in the leadership and management literature is that a high-quality LMX relationship can substantially increase the level of occupational stress. This research finding is emerged from the employees working in a large multinational engineering company of a developing country. Findings and managerial implications are discussed.*

Keywords: LMX, job involvement, occupational stress, energy sector, MNCs, Pakistan.

Introduction

Occupational stress is conceptualized as a subjective feeling of an individual when work demands exceed his/her capacity to cope with the requirements on time (Schwepker Jr & Good, 2017). In such circumstances, people feel as if they have lost control of their workplace because of ever-increasing work demands. The feeling of incapability to control things prompts an expanded sentiment of vulnerability as one cannot decide the best

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way to bring about feeling compromised by a situation that has basically assumed control over one's life.

Occupational stress has been one of the most severe looming problems for both individuals as well as organizations in labour- and technology-intensive industries. According to Statista (2019) which referred to the most-recently available study of Trades Union Congress (TUC) with more than 1,000 safety representatives, TUC found that occupational stress is the biggest threat or hazard to employees' health in workplaces in the United Kingdom (Statista, 2019).

Similarly, the Labour Force Survey (LFS) conducted by a British government agency named Health and Safety Executive (HSE, 2018) revealed that occupational stress has been rapidly increasing in recent years.

Job involvement refers to "...individuals' psychological identification with their work, and reflects the degree to which they are engaged in that work" (Li, Huang, Zhang, & Yang, 2019). In addition to self-regulation and task commitment, it is the third cognitive feature of job engagement thus, both involvement and engagement are the two highly connected constructs in management discipline (Taghavi, 2019). In other words, employee engagement is a function of job involvement, satisfaction and enthusiasm (Shrotryia & Dhanda, 2019). It is a positive job attitude which can serve as a key factor in increasing organizational effectiveness and employee's intrinsic motivation. Besides, an increasing rate of job involvement can help a thriving organization in gaining a competitive advantage over rival firms (Ebeh, Njoku, Ikpeazu, & Benson, 2017).

Leader-member exchange (Graen & Uhl-Bien, 1995) is the frequently- researched relationship- oriented leadership theory since mid-1980s to date which finds its roots in the social exchange theory (Blau, 1964). The central tenet of LMX theory holds that a leader establishes different types of relationship with his/her subordinate (called 'the member' in LMX connotation). The member may fall into one of the two leader-created cognitive groups of subordinates called in-group and out-group. More precisely, the in-group member enjoys maximum tangible and intangible benefits mutual trust in the eyes of his leader thus, are benefited in most of the circumstances. In contrast, the leader maintains a transactional leadership style with an out-group member thus, this member is held accountable for each and every tasks written in his/her job descriptions. Besides, an out-group member is not preferred for important assignments which might have been very useful for future development. In short, LMX theory largely based on a two-way (called dyadic) relationship between the leader and the member (Adil & Ab Hamid, 2017).

In fact, the situation of rising acute health issues due to occupational stress is not different in Asian developing countries such as Pakistan. A panel of senior medical practitioners such as Ahmed, Enam, Iqbal, Murtaza, and Bashir (2016) have opined that Pakistan has the highest rate of depression as compared to any other developing countries in the world and occupational stress is one of the major causes of this depression. Thus, it leads us to present a plausible case to empirically examine occupational stress specifically in the energy sector which involves considerably a higher rate of stressful jobs.

It has been widespread in the literature that leadership and stress is inextricably related with each other, however, Harms, Credé, Tynan, Leon, and Jeung (2017) recently argued that there is still a paucity of research for systematically investigating the rela-

tionship between LMX and occupational stress. Although, substantial piece of literature suggest that LMX relationship quality tends to reduce occupational stress, however, considering the looming problem of depression, it is yet to know whether the same LMX-occupational relationship also exist in the developing countries such as Pakistan. Moreover, the energy sector of Pakistan remains highly competitive due to the presence of various domestic and multinational companies in major cities of the country such as Karachi, however, this growing sector is yet to reveal any empirical evidence on a joint relationship between LMX, job involvement and occupational stress. To the best of our knowledge, this is perhaps the very first report in which there is a dearth of knowledge about testing a structural relationship between LMX, job involvement and occupational stress. Therefore, the purpose of this quantitative study is to investigate the unidirectional effect of LMX on occupational stress and whether job involvement mediates the positive relationship between LMX and occupational stress. We believe that the findings of this deductive study would substantiate the existing body of knowledge regarding LMX and occupational stress especially in the context of developing country where the level of depression is the highest as compared to any other Asian developing countries.

Theoretical Background and Hypotheses

Indeed, the LMX relationship between leader and member caters impression of dependability, relational fascination, preparation to give additional support to one another, and above all, a sense of professional respect which is formed over a period of time with frequent interactions with one another (Liden & Maslyn, 1998). Supervisors maintain either low or high quality of LMX relationship. In particular, the in-group members, also called "cadres" (Lagace, Castleberry, & Ridnour, 1993), tend to experience high like-ability ratio by their leaders hence, receive their anticipated assignments and work projects followed by an increased level of supervisor support therefore, they are frequently considered and preferred in management decisions. In contrast, out-group members are relied upon to stick to the essential components of the psychological and written contract where work is just traded for a pay with little open door for great leader-subordinate collaboration (Bauer & Green, 1996). It led Lagace (1990) to call the out-group members as "hired hands" because they once in a while, if ever, meet with their leaders, get little execution input, and are often given unexciting dreary jobs.

Occupational stress is an advanced physiological and mental reaction to requesting circumstances that impact how individuals put their own personal resources to cope up with the stressful conditions (Reb, Chaturvedi, Narayanan, & Kudesia, 2019). If stress is not managed at its early stages, it generally results in pernicious long-term health, performance and well-being related issues. Therefore, this unmanaged level of occupational stress leads to deteriorate LMX quality of relationship between both entities (Reb et al., 2019).

It is also consistent with social identity theory (Ashforth & Mael, 1989) as well as self-identification theory (Schlenker & Weigold, 1989) that managers establish their high performance expectations from their subordinates due to their [managers'] heavy invest-

ment in the development of the subordinates. Thus, following the norms of reciprocity (Gouldner, 1960) manager tends to expect more from the subordinate in terms of positive organizational outcomes on time in exchange of the high-quality LMX relationship the member receives from the manager. Besides, LMX literature also recognizes that the self-image of both leader and member is on stake therefore, managers in a high-quality relationship find themselves actively involved in eliminating contextual barriers such as potential team conflicts, anxiety-oriented duties, unclear role requirements etc. which might hinder the members in meeting the anticipated organizational goals. Therefore, LMX has been found to be negatively correlated with role conflict and task ambiguity (Dunegan, Uhl-Bien, & Duchon, 2002) and role strain (Lagace et al., 1993).

There are several consequences of LMX relationship (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012) such as occupational stress . Literature on sales force job stress reveals that a leader can substantially reduce the stress level of his subordinates by clarifying his expectations to them (Tanner Jr, Dunn, & Chonko, 1993). Similarly, several studies have endorsed that a number of leadership considerations can help subordinates reduce the occupational stress (Sager, Yi, & Futrell, 1998).

Notably, a mindful leader, who is competent enough to self-regulate his emotions and attention, is likely to be more attentive and concerned towards his subordinates' occupational needs thus provides more adequate support as and when needed (Reb, Sim, Chintakananda, & Bhave, 2015). Similarly, subordinates perceive a considerate leaders as making an atmosphere of mental help, shared trust, support and kind disposition (Rafferty & Griffin, 2006). Moreover, the potency of occupational stress can be reduced in the atmosphere of high-quality LMX relationship due to mutual goals, trust and respect. Similarly, authors (Schwepker & Ingram, 2016) have also reported that ethical leadership behaviour exercised by a leader can significantly reduce the occupational stress of the subordinates.

It has been well recognized that high-quality LMX relationship tends to reduce occupational stress, however, it has been extended that the relationship between LMX and occupational stress is curvilinear or has an inverted U-shaped relationship. Nevertheless, they also recognized that employees who are engaged in a low-quality LMX relationship tend to face more occupational stress than the in-group members.

Since occupational stress is directly related with employees' intent to leave the organization (Rizwan, Afzal Humayon, Shahid, Aslam, & Shahid, 2017), it appears to be an interesting direction to investigate the direct link between LMX and occupational stress because studies (Darrat, Atinc, & Babin, 2016) have reported that high-quality LMX relationship can reduce turnover intention and turnover intention may be observed due to occupational stress (Schwepker Jr & Good, 2017). Moreover, a burgeoning amount of studies have revealed that LMX relationship quality can reduce the occupational stress of the subordinates (Thomas & Lankau, 2009). Furthermore, in a meta-analytical review, Harms et al. (2017) concluded that LMX is a significant predictor of occupational stress for subordinates. Similarly, (Zhou, Jin, & Ma, 2015; Thomas & Lankau, 2009) also hypothesized that LMX has negative correlation with work stress. Therefore, we posit the following hypothesis:

H_1: *LMX has negative effect on occupational stress.*

Job involvement denotes the degree to which people identify with and are connected with their jobs (Kanungo, 1982). It implies that employees who perceive that they are highly involved in their jobs tend to also highly connect their identity, interests and personal and professional goals with their jobs. In addition, due to specific job attributes in the workplace, employees are more involved in their duties. For instance, a subordinate tends to be more involved in their work when she believes that her manager gives values to her job.

Past studies have revealed that in-group subordinates who enjoy a high-quality LMX relationship with their superiors actually tend to receive more benefits than their counterparts from their superiors (Graen & Scandura, 1987). Social exchange theory Blau (1964) holds that when subordinates receive comparatively more benefits and trust from their manager, they need to reciprocate the same level of benefits and trust to the manager. In other words, the manager builds expectations that his subordinates could reciprocate the same quality of relationship by performing tasks which are beyond the scope of their job description. It establishes a norm of reciprocity (Gouldner, 1960) which suggests that individuals who have been benefited by their managers tend to feel obligated to revert or reciprocate their highest level of assistance to the managers who have benefited them earlier.

The same norm of reciprocity applies to LMX relationship because due to high-quality LMX relationship the member (the subordinate) feel obligated to reciprocate the same relationship back to the managers thus they need to be more involved in their jobs. In contrast, employees who stay in the out-group category of LMX relationship are primarily restricted to their job description in such a manner that they are held accountable for the tasks written in their job description. It leads them to strictly follow the guidelines by putting major emphasis on merely performing the duties transcribed in their employment contract without obligating themselves to assist their managers beyond it thus, they are more likely to experience relatively lower job involvement (Cropanzano & Mitchell, 2005). In short, LMX relationship has a direct positive relationship with job involvement in the sense that a subordinate builds her perception to revert back the maximum possible assistance to her manager irrespective the tasks that are beyond the scope of her job description. Therefore, we suggest the following hypothesis:

H_2: LMX has positive effect on job involvement.

In fact, past studies have reported job involvement as a positive phenomenon which brings various positive organizational outcomes such as job satisfaction, employee commitment and lower intent to leave the organization. Nevertheless, high job involvement may result in some negative organizational outcomes also (Lawrence & Kacmar, 2012). For instance, employees with high job involvement bear an emotional attachment and improved identity with their job which in fact, require them to invest relatively more time to suffice the needs of the work roles. It further involves increased amount of time and energy to complete the additional work requirement. These employees often observe that they need to take their office tasks with them to their home which in turn, creates work

and family life conflicts (Parasuraman & Simmers, 2001). We argue that the occupational stress is the basic premise of this situation where employees remain unable to perform adjustment reactions to mitigate the negative consequences of added stress due to their occupational requirements. It is attributed to the fact that these employees continuously think about their unfinished work and how they are going to complete the official assignment next day (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001). In short, it can be concluded that employees with high job involvement tend to experience higher rate of occupational stress due to their increased emotional attachment and identity with their work. Therefore, we formulate the following hypothesis:

H_3: *Job involvement has positive effect on occupational stress.*

Similarly, employees who are engaged in the high-quality LMX relationship are more likely to experience occupational stress as they feel themselves obligated to reciprocate the increased level of support and trust to their managers. Therefore, it would be quite pertinent to examine whether there is an indirect relationship between LMX and occupational stress through job involvement. Following the 'segmentation' approach (Rungtusanatham, Miller, & Boyer, 2014), we also suggest the following hypothesis for measuring the indirect effect between LMX and occupational stress. Figure 1 depicts the research framework of the present study:

H_4: *Job involvement mediates the relationship between LMX relationship quality and occupational stress.*

Figure 1
Conceptual framework of the present study
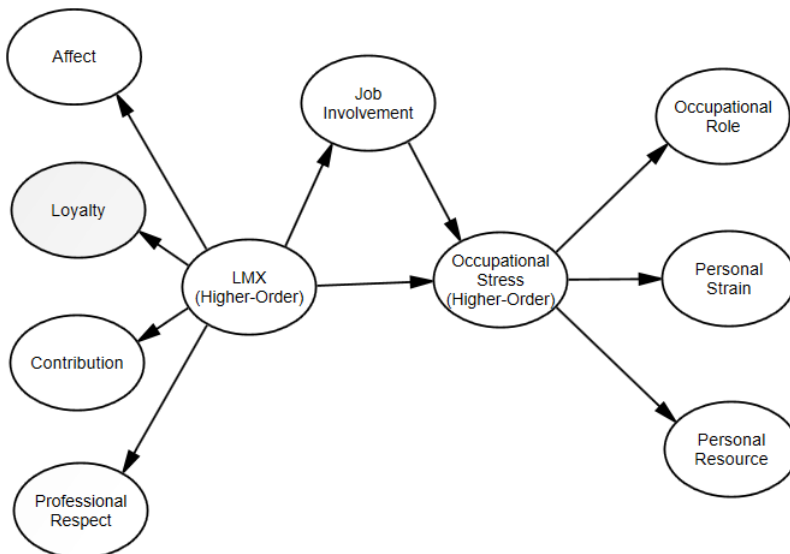
Method

Samples and Procedures

The energy sector of Pakistan remains highly competitive due to the presence of various domestic and multinational companies in major cities of the country such as Karachi, however, this growing sector is yet to reveal any empirical evidence on a joint relationship between LMX and occupational stress. Therefore, by using a convenience sampling technique we distributed over 510 survey questionnaires in a large multinational engineering company of the energy sector situated in Karachi, Pakistan, out of which we managed to receive a useable sample of 342 forms (the response rate was 67%). This company has been well-recognized in providing power generation and industrial solutions and services since its inception in 1996. They enjoy a portfolio of diverse range of customers including household consumers, public institutions, domestic industries as well as multinational giants. Both anonymity and confidentiality (Babbie, 2015) were maintained during the entire phase of data collection. An 'informed consent' (Ruane, 2016) was communicated in advance to make sure that the participation from each respondent is voluntary which may be withdrawn at any time. Moreover, respondents were also informed that their responses would only be used for academic purposes.

Measures

Using a positivist ontological approach with etic epistemological belief, this study used a total of 49 indicators which were measured on a five-point Likert type scale (1=strongly disagree to 5=strongly agree). All items were self-reported and responded in a non-contrived field-study setting.

Leader-Member Exchange (LMX)

It measures an employee's perception about the quality of reciprocal relationship with his/her immediate supervisor or manager. Instead of using a conventional uni-dimensional construct of LMX (i.e. LMX-7; Graen and Uhl-Bien (1995)), we adapted a total of 23 items classified into a four-dimensional construct of LMX as originally proposed by Dienesch and Liden (1986). We adapted 12 items from Liden and Maslyn (1998) and the remaining 11 items from Wang, Law, and Wang (2001); Bhal and Ansari (1996). These four dimensions include:

Affect (6 items): It measures the mutual likability based on the emotional attachment because both admire and enjoy the social company of one another. A sample item reads, "I like my supervisor very much as a person". Cronbach alpha = 0.61

Loyalty (6 items): It measures the degree to which both leader and member are loyal to one another. A sample item reads, "My supervisor would defend me to others in the organization if I made an honest mistake". Cronbach alpha = 0.73

Perceived Contribution (6 items): It measures the perception of the member in terms of magnitude, direction and quality with review to put forth mutual goals. A sample item

reads, "I am willing to apply extra efforts, beyond those normally required, meet my supervisor's work goals". Cronbach alpha = 0.83

Professional Respect (5 items): It measures the perception of the member to the extent to which he/she has built a reputation within and/or outside the organization in excelling at his/her job duties. A sample item reads, "I respect my supervisor's knowledge of and competence on the job". Cronbach alpha = 0.76

Job Involvement

This latent variable attempts to measure the degree to which an individual is involved in his/her job. We adapted eight items from Kanungo (1982) to measure job involvement. A sample item reads, "Most of my interests are centred around my job". This was only one reverse codded item in this scale. Cronbach alpha = 0.86

Occupational Stress

We used a reduced version of Occupational Stress Inventory-Revised instrument (OSI-R^{TM}; Butt (2009)). This inventory is primarily used for respondents having at least 18 years of age. It is classified into three dimensions namely, occupational role, personal strain and personal resources as follows:

Occupational Role (OR; 6 items): A high scale value of OR represents a higher level of occupational stress. The OR dimension of occupational stress caters six different aspects including role overload, role insufficiency, role ambiguity, role boundary, responsibility and physical environment. A sample item states, "I am bored with my job". Cronbach alpha = 0.70

Personal Strain (PS; 6 items): A higher scale value of PS denotes a higher level of psychological strain. This scale covers four different aspects of PS including vocational strain, psychological strain, interpersonal strain and physical strain. A sample item states, "So many thoughts run through my head at night that I have trouble falling asleep". Cronbach alpha = 0.89

Personal Resources (PR; 6 items): A higher scale value of PR indicates that the respondent has highly developed coping resources. The PR dimension of occupational stress also encompasses four different aspects including recreation, self-care, social support and rational/cognitive coping. A sample item states, "I am able to do what I want to do in my free time". Cronbach alpha = 0.89

Data Analysis

We used IBM's SPSS version 25, SmartPLS version 3.2.8, Jamovi® version 1.1.6.0, and G*Power version 3.1.9.2 for data analysis. First of all, we performed a-priori and post-hoc statistical power analysis to investigate whether the findings of this study are affected by Type-I and II errors. Then we assessed common-method variance (CMV) and non-response biases. Finally, a two-step approach (Anderson & Gerbing, 1988) was followed in

which firstly a measurement model is developed to ascertain its construct reliability, convergent and discriminant validity. At the end, it then follows testing research hypotheses using a variance-based partial lest square structural equation modelling (PLS-SEM) technique with five-point scale. Very recently, Laguía, Moriano, and Gorgievski (2019) used PLS-SEM technique for a 5-point Likert type scale. We used PLS-SEM because the data did not come from the multivariate normal distribution. For this purpose, we checked skewness and kurtosis of all 49 indicators using Web Power (2019) free online application. Table 1 shows that the p-value of Mardia coefficient for both skewness and kurtosis is statistically different from zero indicating that there is a violation of the assumption of multivariate normality which warrants the usage of PLS-SEM in this study. It utilizes a variance-based SEM technique with non-parametric bootstrapping method.

Table 1
Assessment of Multivariate Normality using Mardia Coefficients

	Threshold Value	Mardia Coefficient	z-Statistic	p-value
Skewness	+/-1	397.9391	22682.528	0.000
Kurtosis	+/-20	2483.2717	-2.057	0.039

Statistical Power Analysis

In order to perform power analysis, we applied a-priori analysis before the data collection and a post-hoc power analysis at the end of the data analysis in G*Power. The minimum sample size required to detect effect was 107 given that a moderate effect size (f^2) = 0.15, Type-II error (power) rate = 0.95, Type-I error rate = 0.05, and number of predictors = 2 (i.e. maximum number of arrowheads pointing towards the main outcome variable). However, we managed to draw a useable sample of 342 responses which not only exceeds the minimum required sample size but also confirms at least 95% statistical power which exceeds the minimum threshold limit i.e. 80% (Cohen, 2013). Besides, a post-hoc power analysis revealed that the statistical power of this study actually accounted for over 99% leaving only one percent chance of committing the Type-II error. In short, both statistical power analyses suggest that the findings of this study are free from Type-I and Type-II errors.

Common Method Variance Bias

To avoid any erroneous conclusions and since we used a mono-method for data collection therefore, we also assessed common-method variance bias (Podsakoff, MacKenzie, & Podsakoff, 2012) using the conventional Harman's single factor test in Jamovi® application software. An unrotated factor solution of a principal component analysis revealed that the first factor merely accounted for only 10.4% of the total variance which is less than 50% of the threshold value (Chaubey, Sahoo, & Khatri, 2019). It indicates that there is no manifestation of CMV bias in this study (Podsakoff et al., 2012).

Non-Response Bias

Non-response bias takes place when "...those who do not respond to a survey may have answered differently than those who do respond resulting in biased results that do not accurately reflect the population of interest" (Maitland et al., 2017). For this purpose, we applied the Extrapolation method (Armstrong & Overton, 1977) which holds an assumption that those people who respond unwillingly or substantially late are more likely to bear the characteristics of non-respondents (Pace, 1939). In this study, we marked early respondents to those who responded within a month, however, those who responded after a month even after follow-up calls or emails, we had to tag them as late respondents. Of the 342 valid responses, there are 279 (81.5%) early responses and 63 (18.4%) late responses.

Following the guidelines of Armstrong and Overton (1977), an independent sample t-test (Table 2) was performed to assess the potential presence of non-response bias in this study. Levene's test for equality (or homogeneity) of variances indicates that there is a no significant difference in terms of homogeneity of variances between the early and late responses for each variable. Moreover, one minor exception of 'Affect', the p-value of equality of means is also statistically non-significant which indicates that there is no significant difference in early and late responses (Pallant, 2016). In other words, the usable sample is not affected by non-response bias hence, both early and late respondents of this study actually represent the same target population.

Measurement Model

A two-step approach (Anderson & Gerbing, 1988) was followed in which a measurement model was developed. Table 3 shows that only 34 (approx. 70%) indicators substantially loaded onto their respective dimension or latent construct.

Table 2
Assessment of non-response bias using independent samples t-test

Latent Variables	Response Type	N	Mean	SD	Levene's Test for Equality of Variances		t-test for Equality of Means		
					F	Sig.	t	df	Sig. (2-tailed)
Affect	Early Response	279	4.115	0.423	1.329	0.250	2.020	99.923	0.046
	Late Response	63	4.005	0.380					
Loyalty	Early Response	279	3.973	0.582	1.073	0.301	1.176	84.343	0.243
	Late Response	63	3.865	0.671					
Contribution	Early Response	279	3.610	0.896	0.214	0.644	-0.120	95.547	0.905
	Late Response	63	3.624	0.851					
Prof_Respect	Early Response	279	4.216	0.541	0.005	0.945	-0.619	102.021	0.537
	Late Response	63	4.258	0.473					
Job_Involvement	Early Response	279	3.802	0.752	0.072	0.789	0.212	93.935	0.833
	Late Response	63	3.780	0.732					
Occ_Role	Early Response	279	3.891	0.606	0.062	0.803	0.091	91.787	0.928
	Late Response	63	3.884	0.609					
Personal_Strain	Early Response	279	2.674	1.087	1.246	0.265	0.561	95.311	0.576
	Late Response	63	2.593	1.036					
Personal_Resource	Early Response	279	3.608	0.955	0.275	0.600	-0.207	92.692	0.836
	Late Response	63	3.635	0.946					

Note: Equal variances not assumed

Table 3
Measurement Model (Construct Reliability, Convergent Validity and Collinearity

Latent Construct	Dimensions	Indicators	Loadings	CR	AVE	VIF
Leader-Member Exchange (LMX)	Affect	Affect4	0.892	0.789	0.654	1.116
(Higher-Order)		Affect6	0.716			1.187
	Loyalty	Loyalty1	0.683	0.800	0.572	1.205
		Loyalty2	0.772			1.230
		Loyalty6	0.809			1.325
	Perceived Contribution	Contribution2	0.843	0.912	0.673	2.246
		Contribution3	0.799			1.891
		Contribution4	0.820			2.060
		Contribution5	0.818			2.026
		Contribution6	0.823			2.098
	Professional Respect	Prof_Respect1	0.817	0.866	0.618	1.887
		Prof_Respect3	0.872			2.025
		Prof_Respect4	0.745			1.378
		Prof_Respect5	0.701			1.523
Job Involvement		Job_Inv1	0.737	0.878	0.507	1.575
		Job_Inv2	0.709			1.701
		Job_Inv3	0.698			1.537
		Job_Inv4	0.760			1.542
		Job_Inv6	0.692			1.530
		Job_Inv7	0.684			1.536
		Job_Inv8	0.702			1.576
Occupational Stress	Personal Resource	Per_Resource1	0.823	0.910	0.670	2.156
(Higher-Order)		Per_Resource2	0.812			1.987
		Per_Resource4	0.818			2.012
		Per_Resource5	0.831			2.177
		Per_Resource6	0.809			1.995
	Personal Strain	Per_Strain1	0.715	0.919	0.654	3.191
		Per_Strain2	0.792			2.410
		Per_Strain3	0.861			3.355
		Per_Strain4	0.842			2.790
		Per_Strain5	0.784			3.607
		Per_Strain6	0.849			2.802
	Occupational Role	Occ_Role1	0.863	0.808	0.679	1.174
		Occ_Role5	0.782			1.202

Note: All outer loadings are statistically different from zero at 99.99% CI (p<.001). All indicators are reflective.

The outer loadings were within the range of 0.683 and 0.892. All variables demonstrate good construct reliability because each composite reliability (CR) value is in excess of 0.70 (Hair, Hult, Ringle, & Sarstedt, 2017). Furthermore, the convergent validity is also established for each variable because the average variance extracted (AVE) value is greater than the minimum threshold limit of 0.50 (Henseler, Ringle, & Sarstedt, 2015). Besides, the variance inflation factor (VIF) value is less than 5.0 indicating that there is no issue of multicollinearity or lateral collinearity (Kock, 2015).

Finally, the discriminant validity is assessed by using Fornell-Larcker criterion (Fornell & Larcker, 1981) and Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler et al., 2015). Table 4 shows the square root of AVE on the diagonal, whereas the square of correlations in off-diagonal. It can be observed that all of the diagonal values are greater than its respective off-diagonal values in both rows and columns suggesting that the discriminant validity has been established (Hair et al., 2017).

Table 4
Discriminant Validity Using Fornell-Larcker Criterion

Latent Variable	Affect	Contribution	Job Involvement	Loyalty	Occupational Role	Personal Resource	Personal Strain	Professional Respect
Affect	**0.809**							
Contribution	0.046	**0.821**						
Job Involvement	0.003	0.082	**0.712**					
Loyalty	0.061	0.087	-0.056	**0.756**				
Occupational Role	0.053	-0.089	0.055	-0.021	**0.824**			
Personal Resource	0.028	-0.049	-0.073	0.205	-0.014	**0.819**		
Personal Strain	0.196	0.165	0.138	0.139	0.057	-0.042	**0.809**	
Professional Respect	0.047	-0.074	-0.040	-0.047	-0.089	-0.033	0.114	**0.786**

Note: Square-root of AVE is shown in boldface on diagonal.

Furthermore, the HTMT matrix (Table 5) illustrates that all ratios of correlation is less than the stringent criterion (HTMT 0.85) as suggested by Kline (2015) which is a further indication of discriminant validity.

Table 5
Discriminant Validity Using Heterotrait-Monotrait (HTMT) Ratio of Correlations

Latent Variable	Affect	Contribution	Job Involvement	Loyalty	Occupational Role	Personal Resource	Personal Strain	Professional Respect
Affect								
Contribution	0.104							
Job Involvement	0.039	0.107						
Loyalty	0.166	0.120	0.123					
Occupational Role	0.172	0.134	0.135	0.136				
Personal Resource	0.077	0.081	0.103	0.273	0.055			
Personal Strain	0.305	0.186	0.149	0.272	0.090	0.072		
Professional Respect	0.197	0.096	0.061	0.097	0.137	0.050	0.143	

Note: HTMT.85 criterion is used.

Hypotheses Testing Using PLS-SEM

At the end of the two-stage approach, a structural model is constructed to test research hypotheses. In order to maintain clarity, we took 'Latent Variable Scores' out of the finalized measurement model before performing SEM analysis. Table 6 illustrates both direct and indirect (mediating) effects from an exogenous to endogenous latent variable. In addition, unstandardized estimates, their respective standard error, critical ratio (also called t-statistic), p-values, 95% confidence interval bias corrected (CIBC), and effect size are also tabulated. The statistical significance was computed with the recently recommended 10,000 bootstrap resamples (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018). Table 6 also shows the f^2 effect size for each of the direct effects. Based on a more realistic standard for effect sizes i.e. 0.005, 0.01, and 0.025 for small, medium, and large, respectively (Kenny, 2016) it can be noted that all three direct effects bear sufficient effect size, or in other words, practical significance (Cohen, 2013).

Mediation Analysis

A mediation analysis may be performed by either 'causal' procedure (Baron & Kenny, 1986) or 'bootstrapping the indirect effect' procedure (Preacher & Hayes, 2004, 2008).

Table 6
Hypothesis Testing Using Latent Variable Scores

Direct Effects	Estimate	SE	T Statistics	P Values	95% CIBC	f^2 (Effect Size)
LMX ->OS	0.150	0.048	3.125	0.002**	[0.055, 0.246]	0.024 (Medium)
LMX ->JI	0.076	0.055	1.379	0.168	[-0.025, 0.191]	0.006 (Low)
JI ->OS	0.143	0.053	2.685	0.007**	[0.038, 0.246]	0.021 (Medium)
Indirect Effect:						
LMX ->JI ->OS	0.011	0.009	1.187	0.235	[-0.001, 0.036]	VAF = 7%

Note: CIBC = Confidence Interval Bias Corrected; ** 99% CI (p<.01); SE = Standard Error
LMX = Leader-Member Exchange; OS = Occupational Stress; JI = Job Involvement
Effect Sizes 0.005, 0.01, and 0.025 for small, medium, and large, respectively.
VAF = Variance Accounted For.

In the Baron and Kenny (1986) method, four causal steps are performed: a) a separate effect between an independent variable (IV) and a dependent variable (DV); b) IV and mediator; c) mediator and DV, and d) the mediator was introduced in the presence of IV and the DV (Ramli, Latan, & Nartea, 2018). Undoubtedly, this method has gained lots of attention and acceptance in academia because it was easy to understand, teach and operate (Hayes & Rockwood, 2017; Rungtusanatham et al., 2014).

However, the Baron and Kenny (1986) method of mediation analysis has encountered noteworthy criticism due to its major limitations. The first limitation of procedure was that in this method all of the first three direct causal paths must be statistically significant before the test of mediation. In other words, one had to abandon the mediation analysis if he finds that the step one has a non-significant relationship. MacKinnon, Coxe, and Baraldi (2012) mentioned, "There are many cases where significant mediation exists but the requirement of a significant relation of X to Y is not obtained" (p. 601). Moreover, such way of testing separate direct effects leads to substantially reduce statistical power as well as increasing Type-I error rate. In short, it is also important to note that in this causal approach, the direct effect between IV and DV had to be statistically significant first before applying mediation analysis. In case of parallel mediation, it does not provide specific indirect effects which specify it as one of the major limitations of this method because in case of a simple parallel mediation, the researcher would have no statistical evidence whether the first mediator mediated the relationship between IV and DV or the second mediator. Furthermore, this method do not accommodate structural models having inconsistent mediation (Preacher & Kelley, 2011; Rungtusanatham et al., 2014).

Therefore, to avoid these severe limitations of Baron and Kenny (1986) method, Hair Jr, Hult, Ringle, and Sarstedt (2016) recommended, "When testing mediating effects, researchers should rather follow Preacher and Hayes (2004, 2008) and bootstrap the sampling distribution of the indirect effect, which works for simple and multiple mediator models" (p. 223). In recent times, Ahmad, Zafar, and Shahzad (2015) has also used the same method to test mediation analysis for measuring teacher's creativity in the public HEIs of federal constituency of Pakistan.

Notably, the assessment of indirect effect may be carried out by different procedures such as Sobel test (Sobel, 1982), bootstrap confidence interval, the confidence interval calculated by Monte Carlo simulation (Preacher & Selig, 2012), or by Bayesian method (Yuan & MacKinnon, 2009). The Sobel test requires both direct as well as indirect paths to be nor-

mally distributed, however, Preacher and Hayes (2004, 2008) have contended that direct path a and b may be normally distributed, however, the product of both a*b will not reach normal distribution. This statistical notation leads to the conclusion that Sobel test gives erroneous conclusion of a mediation analysis. Thus, the Sobel test should be avoided in mediation analysis (Hair et al., 2017; Hayes & Rockwood, 2017). Among other procedures i.e. Monte Carlo simulation and Bayesian methods etc., the bootstrapping procedure of the indirect effect which also provides the bootstrap confidence interval, has been popularized in recent times mainly because both covariance-based (i.e. factor- based) as well as variance-based (i.e. component-based) software include built-in procedure of bootstrapping (Hayes & Rockwood, 2017).

Indeed, recent developments in mediation analysis procedure have emphasized that a single statistical test to measure an indirect (mediating) effect is only required to test a mediation hypothesis (Preacher & Hayes, 2004, 2008). It has been further argued that a direct effect does not have to be statistically significant before testing a mediation hypothesis (Nitzl, Roldan, & Cepeda, 2016) because of two prime reasons. First, due to a low sample size and/or the potential presence of extraneous variables (such as a moderator), the direct relationship between the IV and DV may not reach statistical significance. Second, there might not be enough statistical power to predict the impact of IV on DV. Therefore, only the assessment of an indirect effect is required to test a mediation hypothesis in which a mediator must be present between an IV and DV, and the IV must affect the mediator and the mediator must affect the DV (Hayes & Rockwood, 2017). Thus, as discussed earlier, it also rationalizes the "segmentation approach" (Rungtusanatham et al., 2014) used in this study to posit H4.

Therefore, this study used 'bootstrapping the indirect effect' procedure to test mediation hypothesis. Bootstrapping is a non-parametric resampling procedure and has been recognized as more powerful and rigorous method for mediation analysis (Ali et al., 2018; Carrión, Nitzl, & Roldán, 2017). Among the several types of bootstrapping algorithms, we applied bias-corrected bootstrap confidence interval because (Hayes & Scharkow, 2013) recommended it "as the most trustworthy test if power is of utmost concern" (p. 1918) "... regardless of sample size" (p. 1924). Moreover, the bootstrapping procedure is also best suited for this study because the assumption of the multivariate normality has not been met (see Table 1).

Recent advancements in mediation analysis such as (MacKinnon et al., 2012; Rungtusanatham et al., 2014) have advised not to classify the type of mediation i.e. full or partial mediation (Baron & Kenny, 1986) or complementary, competitive (or inconsistent), or indirect-only mediation (Nitzl et al., 2016). It is because of the fact that a researcher generally concludes a full (or complete or perfect) mediation when there is no statistically significant evidence of the direct effect of IV on the DV. While supporting this argument, Preacher and Kelley (2011) argued that "...perfect mediation exists when there is not sufficient evidence to demonstrate that it does not" (p. 96). In other words, "...using the absence of evidence... as evidence of absence..." (p. 96). It clearly suggests that "complete mediation can never be truly tested" (Rungtusanatham et al., 2014) as it counters some serious criticisms against the fundamental philosophy of a scientific inquiry.

Table 6 also shows the results of H_4 i.e. the indirect (mediation) effect using the rec-

ommended bootstrap resamples with 95% CIBC (two-tailed test). It can be noted that the indirect effect from LMX to occupational stress via job involvement is statistically non-significant (β = 0.011; t = 1.187). furthermore, it is also important to note that the boot-strap 95% CIBC (lower and upper bound limits) obtained for the specific indirect effect does pass through zero indicating that H_4 is not supported (Hair et al., 2017; Ramli et al., 2018). More precisely, job involvement does not mediate the relationship between LMX and occupational stress.

Finally, the magnitude of the mediation analysis is calculated by variance accounted for (VAF) approach which is used to conclude the type of mediation which represents the ratio between indirect and total effect (Hair et al., 2017). In our case, the specific indirect effect from LMX to occupational stress equals 0.011; the direct effect from LMX to occupational stress equals 0.150; and the total effect = 0.161. Thus, the VAF equals 0.07 (or 7%) which is less than the 20% of threshold value suggesting that there is no mediation.

Discussion

The results of first hypothesis reveal that LMX has a significant but, on contrary to our expectation, a positive effect on occupational stress (estimate = 0.150, t-value = 3.125**). It might be attributed to the fact that a high-quality LMX relationship builds a strong faith with the in-group member of this dyadic relationship assuming that the member is trustworthy and reliable enough to meet the requirements. At one side, the member does not find himself or herself confident enough to refuse the assignment because the member has witnessed the pain what out-group suffer from. On the other side, the member finds least capacity to suffice the emerging occupational needs of the leader. In short, the in-group member cannot afford to be removed from the in-group zone which eventually leads to increase occupational stress for the member.

The findings of second hypothesis show that LMX has a non-significant effect on job involvement (estimate = 0.076; t-value = 1.379). In fact, job involvement represents the degree to which an individual is psychologically identified with his job and engaged in that work. The respondents are from a large multinational company (MNC) operating in Karachi where an increasing rate of unemployment is generally reported and observed. We argue that employees are generally selected very carefully in an MNC where to be a self-initiative and self-motivated are mainly assessed through assessment centres before their formal selection. These two aspects not only account for major selection criteria but the incumbents have to maintain these aspects regularly after their appointment. Even for the entire duration of probation period, these incumbents ought to maintain these aspects up to the required MNC's occupational standard. In short, when the status of these incumbents are converted into permanent employees so that they could enjoy all possible organizational benefits as a regular employee, they have actually learnt how to involved and engaged in their tasks having major reliance on their self-motivation.

The results of the third hypothesis reveal that job involvement has a significant positive effect on occupational stress (estimate = 0.143; t-value = 2.685**). We argue that job involvement is one of the primary features of employees working in a large MNC in which, as opined earlier, they are required to apply their cognition in search of identify-

ing every possible ways for individual, team and organization development and growth. MNCs usually develop such organizational practices which enable their human capital to embark on excellent opportunities for personal growth such as frequent domestic workshops, national and international training sessions, solo presentations of unique ideas in from of superiors and other cross-functional teams, attending different live and online discussion forums to learn from senior management, and successful industry professionals including entrepreneurs and business incubation experts. Moreover, the management of MNCs expect their employees to equip themselves from every possible aforementioned organizational activities, however, considering the intense workload according the one's job description in MNCs, these management expectations tend to increase occupational stress for their employees. In other words, the more the employees involved in their jobs, the more chances of occupational stress there will be.

Conclusion

Occupational stress is one of the looming individual and organizational problems especially in the energy sector of a developing country such as Pakistan. Since various organizational and boundary conditions tend to cause occupational stress in the form of psychological and/or psychological impediments, it also results in various negative organizational consequences such as different types of deviant workplace behaviour, uncivil acts such as mortification, ostracism etc. In the very beginning we illustrated that the depression rate is highest in Pakistan as compared to any other developing countries which is mainly caused by occupational stress. This study, which is perhaps the very first report in the energy sector of Pakistan, reveals that a high-quality LMX relationship tend to directly increase this occupational stress without having any intermediary effect of the degree to which an employee is involved in his/her job. We argued that the importance of managing a quality relationship between the leader and the subordinate is important, however, it often stifles employee productivity and performance in case when this dyadic relationship starts to demand relatively more requirements which are often found beyond the capacity of the subordinates. Consequently, this unfulfilled and expected to be unfulfilled requirements cause serious occupational stress and usually unexpected consequences such as Karoshi - a Japanese organizational terminology which means death at workplace due to occupational stress).

Theoretical Contribution

This study theoretically contributes equally in the leadership and management literature by arguing that a high-quality LMX relationship with the immediate manager can directly increase the level of occupational stress for the subordinates because this positive relationship is not mediated by job involvement. Therefore, this study maintained that managers should be very much careful with respect to LMX relationship in order to mitigate any potential development of negative organizational consequences such as occupational stress.

Finally, this study presents these two new research findings emerged from an understudied social context of a developing country.

Managerial Implications

We argue that building occupational stress in the workplace has been a common observation, however, fortunately its negative repercussions may be mitigated with adequate counseling, out-of-the-job trainings, peer support, and above all, the will power of the person who is suffering from the stress. In short, occupational stress is a normal phenomenon across every level of the hierarchy in today's hyper-competitive era irrespective of the individual and/or organizational factors. The aim should be to start combating with stress as early as possible with minimum possible damage to one's self-esteem, psychological and social disgrace.

Considering the high rate of unemployment in the city, employees may not afford to lose their job in MNCs despite the fact that they might have to confront with heavy workload and responsibilities such as daily reporting of their progress. Unlike non MNCs, employees in MNCs are required to share novel and useful ideas on occasional basis in order to improve the individual, unit as well as organizational effectiveness and efficiencies. In the given scenario, these employees seem to have major focus on their work rather than looking for establishing a high-quality LMX relationship with their managers. Since In contrast to the trade unions in the Chinese companies, job involvement is generally not a major concern in the unions of Western companies (Li et al., 2019). Similarly, unlike Western MNCs, we might expect a non-significant relationship between LMX and job involvement in the context of a developing country in Asia. In other words, we maintain that LMX quality of relationship is not merely the only force for subordinates to involve in their jobs.

On contrary to the research findings of Lawrence and Kacmar (2012) in which job involvement partially mediated the relationship between LMX and stress, this study finds no empirical evidence of any mediating effect of job involvement for the same relationship. It leads us to conclude that the mediating role of job involvement for the relationship between LMX and occupational stress is still inconclusive thus, requires further empirical examination in future. In this study job involvement did not mediate the positive relationship between LMX and occupational stress. This might be attributed to the fact and also shown by H1 results that LMX has a direct and positive relationship with occupational stress. The central premise lies in the fact that it is not because of the job involvement employees tend to suffer from occupational stress. Rather, LMX relationship is a very strong predictor in increasing occupational stress in MNCs in its own right.

Both management and government should need to articulate appropriate policies to mitigate the level of depression among employees which, if not addressed on time, could turn out to substantially give a rise to employees' well-being issues. More precisely, it is essential to objectively and actively work on mitigating the level of occupational stress up to an acceptable level so that employees could not only enjoy their work but also provide their maximum effective output on time. It is quite necessary to work on this issue considering the fact that Pakistan has the highest rate of depression than any other developing

countries of the world (Ahmed et al., 2016). If the higher management of engineering companies remains successful in mitigating the negative effect of occupational effects, they would certainly experience several positive and healthy organizational outcomes such as affective commitment to change initiatives, employee ownership, job involvement, organizational identification and seemingly an effective contribution in helping workforce to increase their emotional intelligence - a factor which is not considered as one of the most useful agents in managing workforce diversity. In short, managing occupational stress could bring long-standing outcomes though, it requires a serious attention as well as it necessitates a few proactive measures in the engineering firms, in particular.

Besides, we argue that this is not only the sole responsibility of the management to institutionalize organizational practices for reducing the level of occupational stress for the workforce; individual employees should also strive to identify every possible actions through which they could manage their occupational stress. It is essential in the social context of Pakistan where referring to a psychiatrist in Pakistan is generally considered as a 'social taboo' due to which people with depression disorder tend to seek medication from 'faith healers' and often they prefer to take self-medication which further complicate the illness (Ahmed et al., 2016). It leads us to further suggest that employees who experience a higher occupational stress ought to include different types of physical exercises as well as recreational activities preferably with their family members on regular basis. These activities would enable them to actively combat with their stress level. Besides, a number of minor routine activities may also be very useful in reducing stress level such as making a habit not to shirk the tasks rather, finish duties on the same day without taking pending work to home.

Although, these suggestions may sound implicit and obvious in the daily work routines for most of the employees in developed nations, we believe that people in Pakistan are yet to revitalize their attitude and behaviour in the workplace in order to reduce occupational stress. In the context of multinational organizations where daily reporting of work progress to superiors is a routine procedure, we argue that if employees find themselves reluctant in investing their considerable amount of time and efforts in improving their skills and competencies, it will further pile up their stress level to an unmanageable level. In short, we suggest that although, management should take necessary measures such as training and workshops to reduce occupational stress for their employees, we find it equally important for the individual employees to practice such approved organizational practices which could enable them in addressing stress-related issues. Fortunately, managing stress effectively and efficiently is within the control of an employee provided that he or she willingly interested to do so.

Management may also utilize the idea of introducing an emergency mass notification system (EMNS, Pickren & Harper, 2019) in their organizations to communicate major threats and collective issues in real time with all concerned stakeholders such as employees, customers, approved vendors etc. These threats and issues include extreme weather conditions which could hinder timely shipments, cyber security which may endanger the confidential data of all stakeholders etc. The central tenet of implementing EMNS is to spontaneously respond to an emergency situation before observing its unwanted negative consequences.

Limitations and Directions of Future Studies

This study is not free from several limitations. The sample was drawn from only one large multinational organization operating in the largest city of Pakistan using convenience sampling technique therefore, the findings of this study may not be generalized on to a larger population within the same energy sector. Besides, this study used a cross sectional data which actually precludes this study in explaining cause-and-effect relationship between the study variables in detail.

We believe that the findings of this study may originate some new directions for future studies. For instance, a Confirmatory Tetrad Analysis (CTA-PLS) may be performed in SmartPLS to ascertain whether the measurement model is reflective or formative. Similarly, PLSpredict procedure may also be used in SmartPLS to investigate the predictive power of the structural model. Beside, in order to alleviate the intensity of occupational stress, future studies may include different positive organizational phenomena as moderating variables such as psychological empowerment (Faridi & Baloch, 2019), perceive supervisor support, peer support, life-work balance, cyber-loafing etc. In addition, future studies may take LMX data from the leader's perspective because, when it is combined with feedback-seeking behaviour (Lam, Peng, Wong, & Lau, 2017), new deeper insights could emerge especially in the explanation and prediction of contextual performance. Furthermore, future studies may also gear their research in the direction of knowing the context-specific circumstances in which how and why LMX is influenced by social networking (called Social LMX or SLMX). In essence, it may be useful to develop conceptual framework in the said direction, though (Porter & Woo, 2015) may assist well in this regard too.

Moreover, considering the greater influx of trade unions in manufacturing companies that are often backed by political parties, Li et al. (2019) recently found that union participation had a direct relationship with job involvement. Therefore, we confidently suggest that this aspect also presents a fertile ground for future studies of occupational stress especially in the form of a multilevel modelling (MLM) with moderated mediation analysis.

References

Adil, M. S., & Ab Hamid, K. (2017). Impact of individual feelings of energy on creative work involvement: A mediating role of leader-member exchange. *Journal of Management Sciences*, *4*(1), 82–105.

Ahmad, I., Zafar, M. A., & Shahzad, K. (2015). Authentic leadership style and academia's creativity in higher education institutions: Intrinsic motivation and mood as mediators. *Transylvanian Review of Administrative Sciences*, *11*(46), 5–19.

Ahmed, B., Enam, S. F., Iqbal, Z., Murtaza, G., & Bashir, S. (2016). Depression and anxiety: A snapshot of the situation in Pakistan. *International Journal of Neuroscience and Behavioral Science*, *4*(2), 32-36.

Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, *30*(1), 514-538.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, *14*(3), 396–402.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, *14*(1), 20–39.

Babbie, E. R. (2015). *The practice of social research*. Boston, MA: Cengage Learning, Inc.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.

Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, *39*(6), 1538–1567.

Bhal, K. T., & Ansari, M. A. (1996). Measuring quality of interaction between leaders and members. *Journal of Applied Social Psychology*, *26*(11), 945–972.

Blau, P. (1964). *1964 exchange and power in social life.* New York: Wiley.

Butt, Z. U. (2009). *The relationship between occupational stress and organizational commitment in non-governmental organizations of Pakistan* (Unpublished doctoral dissertation). National University of Modern Languages, Islamabad.

Carrión, G. C., Nitzl, C., & Roldán, J. L. (2017). Mediation analyses in partial least squares structural equation modeling: Guidelines and empirical examples. Springer.

Chaubey, A., Sahoo, C. K., & Khatri, N. (2019). Relationship of transformational leadership with employee creativity and organizational innovation. *Journal of Strategy and Management*, *12*(1), 61-82.

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. New York: Lawrence Erlbaum Associates.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900.

Darrat, M., Atinc, G., & Babin, B. J. (2016). On the dysfunctional consequences of salesperson exhaustion. *Journal of Marketing Theory and Practice*, *24*(2), 236–245.

Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health*, *27*(4), 279–286.

Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, *11*(3), 618–634.

Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, *38*(6), 1715–1759.

Dunegan, K. J., Uhl-Bien, M., & Duchon, D. (2002). Lmx and subordinate performance: The moderating effects of task characteristics. *Journal of Business and Psychology*, *17*(2), 275–285.

Ebeh, R. E., Njoku, E. C., Ikpeazu, O. C., & Benson, L. (2017). Organizational commitment and job involvement among casual workers: The role of organizational justice. *Global Journal of Human Resource Management*, *5*(4), 17–32.

Faridi, A., & Baloch, A. (2019). Training and development methods affecting professionalism and empowerment of banking sector employees. *Journal of Management Sciences*, *6*(2), 75–92.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*, 161–178.

Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, *9*, 175-208.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, *6*(2), 219-247.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM).* CA: Sage, Thousand Oaks.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM).* Los Angeles, USA: Sage Publications, Inc.

Harms, P., Credé, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. *The Leadership Quarterly*, *28*(1), 178–194.

Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, *98*, 39–57.

Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological Science*, *24*(10), 1918–1927.

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.

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, *67*(3), 341-349.

Kenny, D. A. (2016). *Moderation*. Retrieved from `http://davidakenny.net/cm/moderation.htm`.

Kline, R. B. (2015). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, *11*(4), 1–10.

Lagace, R. R. (1990). Leader-member exchange: Antecedents and consequences of the cadre and hired hand. *Journal of Personal Selling & Sales Management*, *10*(1), 11–19.

Lagace, R. R., Castleberry, S. B., & Ridnour, R. E. (1993). An exploratory salesforce study of the relationship between leader-member exchange and motivation, role stress, and manager evaluation. *Journal of Applied Business Research*, *9*(4), 110-119.

Laguía, A., Moriano, J. A., & Gorgievski, M. J. (2019). A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students. *Thinking Skills and Creativity*, *31*, 44–57.

Lam, L. W., Peng, K. Z., Wong, C.-S., & Lau, D. C. (2017). Is more feedback seeking always better? Leader-member exchange moderates the relationship between feedback-seeking behavior and performance. *Journal of Management*, *43*(7), 2195–2217.

Lawrence, E. R., & Kacmar, K. M. (2012). Leader-member exchange and stress: The mediating role of job involvement and role conflict. *Journal of Behavioral and Applied Management*, *14*(1), 39-52.

Li, M., Huang, W., Zhang, C., & Yang, Z. (2019). How union participation influences union commitment and job involvement. *Employee Relations: The International Journal*, *41*(6), 1348-1363.

Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management*, *24*(1), 43–72.

MacKinnon, D. P., Coxe, S., & Baraldi, A. N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business and Psychology*, *27*(1), 1–14.

Maitland, A., Lin, A., Cantor, D., Jones, M., Moser, R. P., Hesse, B. W., . . . Blake, K. D. (2017). A nonresponse bias analysis of the health information national trends survey (hints). *Journal of Health Communication*, *22*(7), 545–553.

Nitzl, C., Roldan, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling. *Industrial Management & Data Systems*, *116*(9), 1849-1864.

Pace, C. R. (1939). Factors influencing questionnaire returns from former university students. *Journal of Applied Psychology*, *23*(3), 388-397.

Pallant, J. (2016). *A step by step guide to data analysis using IBM SPSS*. Berkshire, UK: McGraw-Hill Education.

Parasuraman, S., & Simmers, C. A. (2001). Type of employment, work–family conflict and well-being: a comparative study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *22*(5), 551–568.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of*

Psychology, *63*, 539–569.

Porter, C. M., & Woo, S. E. (2015). Untangling the networking phenomenon: A dynamic psychological perspective on how and why people network. *Journal of Management*, *41*(5), 1477–1500.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891.

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological methods*, *16*(2), 93-115.

Preacher, K. J., & Selig, J. P. (2012). Advantages of monte carlo confidence intervals for indirect effects. *Communication Methods and Measures*, *6*(2), 77–98.

Rafferty, A. E., & Griffin, M. A. (2006). Refining individualized consideration: Distinguishing developmental leadershipand supportive leadership. *Journal of Occupational and Organizational Psychology*, *79*(1), 37–61.

Ramli, N. A., Latan, H., & Nartea, G. V. (2018). *Why should PLS-SEM be used rather than regression? Evidence from the capital structure perspective*. Cham, Switzerland: Springer International Publishing AG.

Reb, J., Chaturvedi, S., Narayanan, J., & Kudesia, R. S. (2019). Leader mindfulness and employee performance: A sequential mediation model of LMX quality, interpersonal justice, and employee stress. *Journal of Business Ethics*, *160*(3), 745–763.

Reb, J., Sim, S., Chintakananda, K., & Bhave, D. P. (2015). *Leading with mindfulness: Exploring the relation of mindfulness with leadership behaviors, styles, and development*. Cambridge: Cambridge University Press.

Rizwan, M., Afzal Humayon, A., Shahid, A. U., Aslam, N., & Shahid, J. (2017). Antecedents of job turnover in educational sector of Pakistan. *International Journal of Organizational Leadership*, *6*(1), 89–101.

Ruane, J. M. (2016). *Introducing social research methods: Essentials for getting the edge*. West Sussex, UK: John Wiley & Sons.

Rungtusanatham, M., Miller, J., & Boyer, K. (2014). Theorizing, testing, and concluding for mediation in SCM research: Tutorial and procedural recommendations. *Journal of Operations Management*, *32*(3), 99–113.

Sager, J. K., Yi, J., & Futrell, C. M. (1998). A model depicting salespeople's perceptions. *Journal of Personal Selling & Sales Management*, *18*(3), 1–22.

Schlenker, B. R., & Weigold, M. F. (1989). *Self-identification and accountability*. Hillsdale, NJ: Erlbaum Associates.

Schwepker, C. H., & Ingram, T. N. (2016). Ethical leadership in the salesforce: Effects on salesperson customer orientation, commitment to customer value and job stress. *Journal of Business & Industrial Marketing*, *31*(7), 914-927.

Schwepker Jr, C. H., & Good, M. C. (2017). Reducing salesperson job stress and unethical intent: The influence of leader-member exchange relationship, socialization and ethical ambiguity. *Industrial Marketing Management*, *66*, 205–218.

Shrotryia, V. K., & Dhanda, U. (2019). Measuring employee engagement: Perspectives from literature. *IUP Journal of Organizational Behavior*, *18*(3), 26–47.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, *13*, 290–312.

Statista. (2019). *Top workplace hazards in the United Kingdom.* Retrieved from https://www.statista.com/chart/6177/stress-is-biggest-threat-to-workplace-health/

Taghavi, S. (2019). Mental construal and employee engagement: For more engagement look at the big picture. *International Studies of Management & Organization*, *49*(1), 99–107.

Tanner Jr, J. F., Dunn, M. G., & Chonko, L. B. (1993). Vertical exchange and salesperson stress. *Journal of Personal Selling & Sales Management*, *13*(2), 27–36.

Thomas, C. H., & Lankau, M. J. (2009). Preventing burnout: The effects of LMX and mentoring on socialization, role stress, and burnout. *Human Resource Management*, *48*(3), 417–432.

Wang, H., Law, S., & Wang, D. (2001). *The lingkage role ofLMX: a mediating effect of LMX on the relationship leadership and followers' performance and OCB.* In annual Academy of Management Meeting, Washington, DC, August.

Web Power. (2019). *Univariate and multivariate skewness and kurtosis calculation.* Retrieved from https://webpower.psychstat.org/models/kurtosis/

Yuan, Y., & MacKinnon, D. P. (2009). Bayesian mediation analysis. *Psychological Methods*, *14*(4), 301-322.

Zhou, H., Jin, M., & Ma, Q. (2015). Remedy for work stress: The impact and mechanism of ethical leadership. *Central European Journal of Public Health*, *23*(2), 176–180.