



Does Perceived Organizational Support Matter? Sequential Mediation Analysis of Job Satisfaction

Nisar Ahmad¹, Mehboob Alam², Bilal Nafees³, Jamshaid Ur Rehman⁴

Abstract

In a challenging environment and current global scenario, satisfied employees play a vital role in the progress and strengthening of institutions. Further, it is very important to recognize the influence of perceived organizational support on the job satisfaction of employees in higher education institutions which have a direct impact on the development of human capital in a country. Therefore, this paper aims to investigate the impact of perceived organizational support on job satisfaction via extrinsic and intrinsic motivation by developing a cross-sectional research design. A self-administrative questionnaire survey method was used for data collection from 429 employees of three public sector universities located in Lahore, Punjab, Pakistan. The results of regression analysis show that perceived organizational support has a significant positive effect on the job satisfaction of employees in higher education institutions. Further, the findings of the study support that extrinsic motivation and intrinsic motivation of employees have a sequential mediation effect on the relationship between perceived organizational support and job satisfaction. The findings of the study suggest that for the job satisfaction of employees supervisory support and procedural justice should be emphasized in higher educational institutions. Moreover, employees' extrinsic and intrinsic motivation should not be ignored as it is proved as a prerequisite for operationalizing the effect of perceived organizational support on the employees' satisfaction.

Keywords: Perceived Organizational Support, Extrinsic Motivation, Intrinsic Motivation, Job Satisfaction, and Sequential Mediation

1. Introduction

Human capital in any organization is an important and valuable asset that looks forward to the dedication from institutions for social-emotional needs referred to as perceived organizational support (PSO) (Riggle et al., 2009). "Perceived organizational support indicates employees' viewpoint for their organization's commitment to value their efforts and their well-being (Eisenberger et al., 1986, p. 501). It is pertinent to mention the factors that enhance the relationship of exchange between employees and the organization (Shore & Wayne, 1993), and resultantly employees engaged and feel a sense of vitality and support (Eisenberger, 2002). Organization Support Theory and Social Exchange Theory (SET) provide the basis for perceived organizational support. These theories consider support as a mechanism for employee's constructive attitudes i.e., performance, behavior, and attitude (Rhoades & Eisenberger, 2002). Support from the organization builds the foundation for employees' commitment and performance.

¹ Corresponding Author, Associate Professor, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan, nisar@hcc.edu.pk

² Lahore College for Women University, Lahore, Pakistan

³ Assistant Professor, Division of Management and Administrative Sciences, UE Business School, Lower Mall Campus, University of Education, Lahore, Pakistan

⁴ Assistant Professor, Department of Economics, Government College University, Lahore, Pakistan

Perceived Organizational Support Theory (POST) accentuates that employees respond to the values they receive from supervisors or institutions. Supervisors reflect the organizational values through supportive conduct toward employee behaviors, which is perceived as a sign of the culture of the organization (Eisenberger et al., 1986; Eisenberger, 2002). Whereas Social Exchange Theory emphasizes that financial interdependence among entities determines the strength of their relationships. Employees work hard to give higher earnings to the organizations when they perceive high organizational support. Alternatively, an organization extends more financial support to the employees who are perceived to contribute more to the organization.

Employees-oriented policies of organizations inspire employees to take more care of the organization's financials. Employees who perceive organizational support, work hard to increase the financial performance of their organization (Tsarenko et al., 2018). Baran (2012) indicated that employees who are strong in commitment to the organization mean that their perceived organizational support is well-built. These reciprocal perceived mutual benefits bound the employees and their organization to develop a supportive work relationship as propagated by SET (Blau, 1964). Recently, Tsarenko et al. (2018) emphasized that employees supported by their organization are more satisfied and demonstrate more dedication to their jobs. Factors that improve employees' job satisfaction to attain organizational performance are a call for the current challenges. Research studies (for example, Nguyen et al., 2014; Prasad et al., 2014) point out some indicators regarding job-related outcomes and job performance to progress organization performance.

For institutions, in the education sector of any country that plays a significant role in the development of individuals, employees' job satisfaction is very important. The education system in South Asian countries is not delivering quality education as per international education quality standards. In Pakistan multistandard education system has created disparity and dissatisfaction. Academic outcomes of educational institutions are deteriorating over time. Among many reasons, job dissatisfaction among teaching staff may be foremost. Job satisfaction results when employees have both intrinsic and extrinsic motivation. In Pakistan, educational institutions lack financial and human resources. As a result, employees have weak intrinsic and extrinsic motivation. It is important to trigger the factors that are helpful in developing the education sector of Pakistan for effective results. For a better quality system of education, it is necessary for institutions and employees to think and act in new ways for better work outcomes and sustainable organizational performance (Leghari, 2003). Therefore, this study is aimed to investigate the effect of perceived organizational support on job satisfaction in the higher education sector of Pakistan.

The objectives of the current study are: First, to explore the impact of perceived organizational support on extrinsic motivation. Second, to examine the impact of extrinsic motivation on intrinsic motivation. Third, to investigate the impact of intrinsic and extrinsic motivation on job satisfaction. Lastly, to examine the dual mediation of extrinsic and intrinsic motivation between perceived organizational support and job satisfaction. This study contributes to existing literature by investigating the mediating role of extrinsic and intrinsic motivation between employees' perception of organizational support and their job satisfaction.

The findings of the study are useful for organizations as well as employees. Perceived organizational support plays an important role in shaping the attitude of employees. This means that employees who perceive organizational support, are more satisfied with their

jobs. Employees' job satisfaction increases when they perceive their organization is taking care of their economic, social, and psychological well-being. Further, employees's perception that they are being highly valued by their organization increases their morale, makes them more energetic, and increases their potential for high job performance. Thus, the findings of the study suggest that in order to develop perceived organizational support, organizations should focus on the extrinsic motives of the employees while rewarding them for their better performance. Further, while developing a job and assigning it to employees, intrinsic motives should be given due consideration.

After describing the motivation for this study in the first section, Hypotheses are developed in the second section. The methodology used to test the hypotheses is described in the third section. The results of the analysis are reported in the fourth section. Discussion of results, conclusion, and implications are narrated in the fifth section.

2. Theoretical Perspective and Hypotheses

2.1. Perceived organizational support and extrinsic motivation

Currently, considering the importance of POS is crucial for the success of the organization. A past study revealed that POS offers institutes the capacity for employee well-being and care for their contribution (Fu, 2012). Based on previous research, in the current century, quality and effectiveness are the main concerns organizations strive for. For this, motivated, committed, and satisfied employees are important. For employee's positive behaviors and performance, POS is gaining importance. It implies when an organization cares and values the employee's contributions, the employee reciprocates the same to the organization which builds long-term effectiveness for both ends (Stinglhamber, 2012).

Ryan and Deci (2002) stated the significance of extrinsic motivation that helps to understand the behaviors of supervisors/leaders to motivate employees extrinsically for overall effectiveness. Motivation from organizations and/or supervisors positioned from controlled to self-directed (Ryan & Deci, 2000). Organized motivation stands for a system that is external and its implementation of another person's values (Gagné & Deci, 2005). Ethical management practices require the establishment of an equitable and transparent system of compensation and recognition. Employees' tireless efforts to promote the organization's performance and status should be duly recognized by awarding them with promotions, best performance certificates, and job security. Management of the institution is accountable for ethical decisions that value employee's well-being (Gagné et al., 2015). POS in terms of reciprocal results is set through social exchange theory (Blau, 1964). This theory emphasizes that social interaction among the units of a society depends on the benefits they would expect from each other. As per this theory, individuals are valued based on the resources and skills beneficial to others (Tsarenko et al., 2018). Organizations that invest in building up the value of employees get a return in terms of an increase in performance.

Tsarenko et al. (2018) specified that employees who believe their efforts and contributions are to be recognized and rewarded, demonstrate high commitment and constructive behavior. Consequently, the exchange process and reciprocal connection are directed toward a satisfied workforce. Being valued and satisfied reciprocates the exchange process towards the organization, and it helps for better performance from both ends. Therefore, the first hypothesis is.

H₁: Perceived organizational support is positively related to extrinsic motivation.

2.2. Extrinsic motivation and intrinsic motivation

For an organization's long-run performance, it is pertinent to mention that consideration of a leader's behavior is important. This means that management/leaders stimulate employees intrinsically (essentially) and extrinsically. For effective results both in terms of performance and behavior, it is necessary that employees have both intrinsic and extrinsic motivation. Self-determination theory (SDT) establishes that self-directed employees have both intrinsic and extrinsic motivation toward their jobs and demonstrate more job satisfaction (Ryan & Deci, 2002). Motivation always requires satisfaction. It is a cause of actions, keenness, and ambitions (Robbins & Coulter, 2014). Intrinsic (fundamental) inspiration is engaging in a behavior that is pleasant, interesting, and enjoyable despite financial rewards/pressure, on the other hand, extrinsic (external) is a behavior driven by the external reward that is restricted (Ryan & Deci, 2000).

Motivation mechanizes the enhanced performance of employees and keeps them animated to achieve the required goals of the organization (Salvador, 2013). The aim of motivation is satisfaction and inspiration that help to advance development and ability for better performance (Steer, 1994). One determinant of employee satisfaction is the salary they take, but there are other factors also that impact their satisfaction, that are not included in pay/salary (Clark, 2015). These other factors may include the environment, support from the organization and supervisors, employee's well-being, and guidance that built their trust in the organization (Shetrone, 2011). To keep employees motivated and recognized, the association strives to find choices that keep individuals satisfied and motivated (Mui, 2015). Characteristics of an organization and /or job are directly connected to satisfaction at a job. This may consist of the work environment, job security, good leadership practices/SOPs, and flexibility of life-work balance. For research studies in organizations, satisfied employees and management/leadership styles have always been major concerns. A past study observed that the positive behavior of leaders have a significant effect on employee work concerning results such as job satisfaction (Yang, 2014). Relatively, the approach of control, based on support, trust, and ethics has gained the attention of literature (House, 2013). Precedent studies signify the contribution of the institution's characters relating to the satisfaction of jobs (Bockerman et al., 2012; Ward., 2017) have positive effects on the overall performance of organizations and employees. So, the hypothesis is

$H_2:$ Extrinsic motivation is positively related to intrinsic motivation.

2.3. Intrinsic motivation and job satisfaction

For sustainable organizational performance, the intrinsic motivation of employees for the assigned task is essential. Quality work can be expected from intrinsically motivated employees only. Employees would have intrinsic motivation when they have autonomy, belonging, and curiosity (Herzberg et al., 1959). Seiler et al. (2012) established that the job content and the nature of processes create intrinsic motivation for employees that results in increased quality performance. In the existing literature on job satisfaction, the intrinsic motivation of employees is a well-established determinant of their job satisfaction (Latham et al., 2013). Islam and Ismail (2008) specify that intrinsically motivated employees are usually self-directed and demonstrate more job satisfaction.

Intrinsic motivation is experienced by employees when they feel their task is enjoyable and interesting and they are learning new things from the assigned task. For a motivated workforce, it is important for an organization to assign those tasks to their employees that are interesting and enjoyable for them (Al-Alawi, 2005). Employee's job-related outcomes like support, productivity, learning, passion and engagement are associated Hence, with the

intrinsic drive, organization/institution needs to look into those factors practically for better performance from the employees (Pink, 2011; Asmadi et al., 2011). This means that intrinsic motivation enhances the performance of employees through mechanized behaviors of individuals that lead to obtaining organizational goals (Rohof, 2013). Satisfaction/inspiration aims to move forward towards expansion, and employee capability for effective organization's goals (Steer, 1994). Thus, our next hypothesis is:

H₃ Intrinsic motivation is positively related to job satisfaction.

2.4. Intrinsic motivation as a mediator between POS and JS

Based on the hypothetical model, it involved that intrinsic motivation mediates the association between POS and JS. Inherent satisfaction is a vital factor for effective leaders and employee behavior, which helps the organization to develop a devoted and engaged workforce. Consequently, a satisfied workforce intrinsically will provide greater performance and other related benefits such as more efficiency and commitment (Oswald et al., 2015; Wen et al., 2019). Intrinsically inspired employees being the representatives of an organization make continuous efforts to establish a good culture (Clark, 2015). As a result, happy employees will be more occupied and produce better results. This escort to satisfaction at the job and engagement towards the job and institution. By this, a contented workforce leads to better production, performance, and prosperity for the organization, as satisfaction at job and performance related to it is connected (Fisher et al 2010), so, we envision that:

H₄: Intrinsic motivation mediates the relationship between perceived organizational support and job satisfaction.

2.5. Extrinsic motivation as a mediator between POS and JS

External (extrinsic) motivation is associated with employees' outcomes. Social determination theory makes the difference between the two forms of motivation. Extrinsic motivation is a different thing that motivates employees externally due to some reward, fear of failure, or punishment (Ryan, 2000). Employees do the work keeping in mind the external rewards such as pay, remuneration, etc. Self-determination theory clarifies both kinds of motivators, that help to motivate the employees in either way (Ryan and Deci, 2000a). This means that organizations are to motivate individuals by using other means. Employers see the factor that affects employee satisfaction, and reward. The employees' concern for financial compensation and promotion created opportunities for employers to set employees engaged in work (Coomber et al., 2007).

Reeser et al. (2005) examined a significant relationship between extrinsic motivation and employees' job satisfaction. They also emphasized the impact of employees' performance and motivation on their job satisfaction. Motivated employees perform more and it in turn increases employees' job satisfaction. Satisfied employees play a very significant role in enhancing the performance of the organization (Babaei et al., 2015). Past study signifies the importance of motivators for better employee performance and indicates a lack of leaders' interest in developing these motivators that directly affect employee behavior (DeSantis & Durst, 1996). In the public sector education system, management is not showing any concern for both motivators but is a point of concern for current challenges because such factors influence the satisfaction of the job (Athira et al, 2016). So, based on existing literature, the following hypothesis is proposed:

H₅: Extrinsic motivation mediates the relationship between perceived organizational support and job satisfaction.

2.6. Sequential mediation of intrinsic and extrinsic motivation

After the discussion on the mediating role of intrinsic and extrinsic motivation, the present study proposed the existence of sequential mediation between extrinsic and intrinsic motivation. Extrinsic motivation for a job leads to intrinsic motivation. The effect of extrinsic motivation on job satisfaction is enhanced if employees have intrinsic motivations for that job. It means extrinsic motivators like remuneration and recognition likely to have a stronger impact on job satisfaction if employees enjoy doing that job. Thus, extrinsic and intrinsic motivation are expected to sequentially mediate the relationship between POS and job satisfaction. The significance of motivated and satisfied employees is the main concern for the organization (Belias et al., 2014).

The satisfaction of a job is the “approach that employee reacts to their work/job, follow on the stability of expectation and wants (Werner et al., 2011). Employee satisfaction at the job impacts their opinion and job assessment (Buitendach & De Witte, 2005). In the public sector, job satisfaction and the sensitivity of employee participation are rewarding and enjoyable (Eybers, 2010; Farrington, 2019). For the success of the organization, the satisfaction of employees at the job is a significant factor (Voon et al., 2011), that helps to enhance the interest and trust of the employee (Griffin and Ebert, 2003), develop a good working environment (Bushra, 2011) and help to hold perceived organizational support (Nelson & Quick, 2013).

Perceived organizational support creates extrinsic and intrinsic motivation in employees which causes an increase in their work performance (Kusluvan, 2003). Satisfied employees demonstrate more commitment to their organization (Jex, 2002). Hence, it is important for management/supervisors of the institution, to know the sensitivity of these factors that affect the needs of employees and help the organization build a culture of support and produce /retain a motivated workforce. Employee needs for job security, compensation, good relationship/environment) known as inferior sort of needs while success, growth, respect, etc. known as higher types of needs (Amos et al., 2008). Job satisfaction is linked with employee needs fulfillment. When the needs of employees are fulfilled, the satisfaction of the job occurs (De Witte, 2005). Contented personnel is fundamental for an institute's success and the institutions are determined to satisfy employees in both terms intrinsically and extrinsically. When an organization practices such norms keeping in mind the sensitivity of employees' needs, motivation, and factors that promote motivation, job satisfaction happens. Leaders' actions through different ways insert value to enhance a supportive work environment and advance the satisfaction and motivation of employees. Hence, based on the above discussion, the following hypothesis is proposed.

H_6 Extrinsic motivation and intrinsic motivation mediate the relationship between perceived organizational support and job satisfaction.

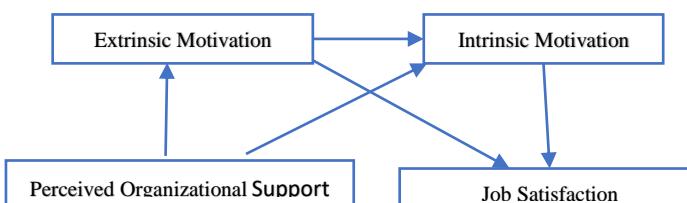


Figure 1: Conceptual Framework

3. Method

3.1. Sample

The population of this study is three public sector universities (Lahore College for Women University, Punjab University, Lahore, and Government College University, Lahore) located in Lahore, Punjab, Pakistan. In this study source of data was cross-sectional and the method of data collection was a questionnaire survey. Based on the stratified random sampling technique, 536 questionnaires were distributed to the academic and administrative employees of the universities. 429 employees returned duly filled questionnaires, which is 80% of the total, 26 responses were incomplete which were discarded, and 80 employees did not return the questionnaire survey which was 15% of the total. Sample distribution and demographic characteristics of respondents are reported in Table 1. In this study, 320 were male respondents and 109 were female respondents who were 75 and 25 percent, respectively. The majority of the participants belong to working on the pay scale (17-20) which was 310 (72%). The majority of participants 239 (56%) participants belong to the age group (31-40). The majority of the participants 145 (34%) have experience of (6-10) years group.

3.2. Measures

The measure which was used in this study is perceived organizational support, extrinsic motivation, intrinsic motivation, and job satisfaction. All the measures used a five-point Likert scale (1= Strongly Disagree, 2=Disagree, 3= Neutral, 4= Agree & 5= Strongly Agree).

3.2.1. Perceived organizational support

This scale has adopted a scale of Eisenberger et al. (1997), it has 8 items. The reliability of the scale is .782. One example item of scale is "Help is available from my organization when I have a problem".

3.2.2. Extrinsic motivation

The extrinsic motivation scale was three items, and it was developed by Ryan & Connell, (1989). The internal consistency of the scale was .833. An example item of the scale was "I can earn money to buy things for myself

3.2.3. Intrinsic motivation

The intrinsic motivation scale was two items, and it was adopted from Ryan & Connell, (1989). The reliability of the scale was .788. An example item was "I find the work interesting".

3.2.4. Job satisfaction

The job satisfaction scale was used, and it was three items, and it was adopted from Sakes, 2006. The reliability of the scale was .744. An example item is "In general, I like working here".

3.3. Control variables

In the current study control variables included gender, pay scale, age, experience, marital status, universities, and department. Data on demographic variables are collected along with the independent and dependent variables used in this study.

4. Results of Analysis

Results reported in Table 2 show that perceived organizational support is positively associated with extrinsic motivation ($r= .368$, $p<.01$) hence supporting H1. The results of Table 4 indicated that intrinsic motivation was regressed by perceived organizational

support and extrinsic motivation. Perceived organizational support forecast significantly intrinsic motivation ($\beta=.230$, $t=2.460$, $p=0.014$, $LLCI=.046$, $ULCI=.414$).

Table 1: Characteristics of Sample

Control Variables		Frequency	Percent
<i>Gender</i>	Female	109	25.4
	Male	320	74.6
<i>Pay Scale</i>	1-4	7	1.6
	5-11	50	11.7
	12-16	62	14.5
	17-20	310	72.3
<i>Age</i>	20-30	118	27.5
	31-40	239	55.7
	41-50	49	11.4
	51-60	23	5.4
<i>Experience</i>	0-5	161	37.5
	6-10	145	33.8
	11-15	65	15.2
	16-20	29	6.8
<i>Marital Status</i>	21-25	15	3.5
	26-30	11	2.6
	31 and Above	3	.70
	Married	134	31.2
<i>Universities</i>	Unmarried	295	68.8
	LCWU	94	21.9
	PU	248	57.8
<i>Department</i>	GCU	87	20.3
	Administration	181	42.2
	Academic	248	57.8

Table 2: Correlation Analysis

Variables	Mean	S. D	1	2	3	4	5	6	7	8	9	10	11
1. Gender	1.75	.436	1										
2. Pay Scale	3.57	.760	.540**	1									
3. Age	1.95	.776	.098*	.381**	1								
4. Experience	2.15	1.295	-.109*	.212**	.722**	1							
5. Marital Status	1.69	.464	-.070	.132**	.330**	.294**	1						
6. Universities	1.98	.650	.027	-.057	-.006	.014	-.056	1					
7. Department	1.58	.494	.596**	.583**	.215**	-.037	.045	.029	1				
8. POS	3.34	.598	.083	.157**	.158**	.033	.060	.004	.168**	1			
9. EM	3.66	.779	.021	.027	.060	.048	-.004	-.068	-.067	.638**	1		
10. IM	3.79	.791	.028	.076	.125**	.194**	.003	.050	-.028	.262**	.250**	1	
11. JS	3.61	.729	.143**	.211**	.109*	.077	.042	.018	.061	.582**	.642**	.280**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3: Outcome: Extrinsic Motivation

Model Summary						
R	R ²	MSE	F-value	df1	df2	p-value
0.638	0.406	.361	211.634	1	427	0.000

Model	Coeff.	SE	t-value	p-value	LLCI	ULCI
Constant	0.884	.205	4.313	0.000	.481	1.287
POS	0.831	.057	14.548	0.000	0.718	0.943

Table 4: Outcome of Intrinsic Motivation

Model Summary						
R	R ²	MSE	F-value	df1	df2	p-value
0.283	0.080	.578	12.111	2.000	426	0.000

Model	Coeff.	SE	t-value	p-value	LLCI	ULCI
Constant	2.511	0.274	9.157	0.000	1.972	3.050
EM	0.141	0.065	2.151	0.032	0.012	0.269
POS	0.230	0.094	2.460	0.014	0.046	0.414

Table 5: Outcome Job Satisfaction

Model Summary						
R	R ²	MSE	F-value	df1	df2	p-value
0.686	0.471	.283	124.502	3	425	0.000

Model	Coeff.	SE	t-value	p-value	LLCI	ULCI
Constant	.639	0.186	3.429	0.001	.273	1.006
EM	.414	0.058	7.115	0.000	0.299	0.528
IM	.089	0.041	2.170	0.031	0.008	0.170
POS	.336	0.063	5.326	0.000	0.212	0.459

Table 6: Sequential Mediation Analysis Results

Direct effect X on Y	Effect	SE	t-value	p-value	LLCI	ULCI
	0.336	.063	5.326	0.000	0.212	0.459
Indirect effect(s) X on Y					Boot LLCI	Boot ULCI
Total effect			.375	.049	.282	.474
POS□EM□JS			.344	.051	.247	.448
POS□IM□JS			.021	.014	.003	.061
POS□EM□IM□JS			.010	.007	.003	.031

Extrinsic motivation also significantly predicts intrinsic motivation ($\beta=.141$, $t=2.151$, $p=0.032$, LLCI=.012, ULCI=.269). The values of β are positive perceived organizational support and extrinsic motivation which indicates that there is a positive relationship. The R2 shows that the model explains an 8% variance in intrinsic motivation. Table 5 shows that job satisfaction is regressed by perceived organizational support, extrinsic motivation, and intrinsic motivation. Perceived organizational support significantly predicts job satisfaction ($\beta=.336$, $t=5.326$, $p=0.001$, LLCI=.212, ULCI=.459). Extrinsic motivation also significantly predicts job satisfaction ($\beta=.414$, $t=7.115$, $p=0.000$, LLCI=.299, ULCI=.528). Intrinsic motivation also significantly predicts job satisfaction ($\beta=.089$, $t=2.170$, $p=0.031$, LLCI=.008, ULCI=.170). The R2 shows that the model explains 47% of variance in the job satisfaction.

4.1. Hypothesis testing

Our first hypothesis is that perceived organizational support positively impacts extrinsic motivation. Results showed that perceived organizational support has positive and significant impacts on extrinsic motivation ($\beta=.831$, $t=14.548$, $p=0.000$) which supported our first hypothesis H₁. The second hypothesis is extrinsic motivation has a positive impact on intrinsic motivation. Results showed that extrinsic motivation positively and significantly impacts intrinsic motivation ($\beta=.141$, $t=2.151$, $p=0.032$) which supported our hypothesis H₂.

The third hypothesis intrinsic motivation has a positive impact on job satisfaction. Results showed that intrinsic motivation is positively and significantly related to job satisfaction (($\beta=.089$, $t=2.170$, $p=0.031$) which supported our hypothesis H₃. The fourth hypothesis extrinsic motivation mediates between perceived organizational support and job satisfaction. The result ($\beta=.344$, LLCI=.001 & ULCI=.031) supported our hypothesis H₄. The fifth hypothesis intrinsic motivation mediates between perceived organizational support and job satisfaction. The result ($\beta=.021$, LLCI=.003 & ULCI=.061) supported our hypothesis H₅. The sequential mediating effect of extrinsic motivation and intrinsic motivation between perceived organizational support and job satisfaction is also

significant, the result ($\beta=.010$, $LLCI=.001$ & $ULCI=.031$) which supports our hypothesis H_6 .

5. Discussion, Conclusions, and Implication

The present study investigates the sequential mediation relationship between perceived organizational support and job satisfaction via extrinsic motivation and intrinsic motivation. Data analysis is carried out with a sample of 427 teaching and non-teaching staff of the public sector universities located in Lahore, Pakistan. Results confirmed POS positively affects IM and EM. Additionally, this study explored that EM and IM also have a positive involvement in job satisfaction. Moreover, results revealed that EM and IM get involved in between POS and job satisfaction.

The results support the social exchange theory and are also consistent with the findings of a recent study conducted by Tsarenko et al., in 2018. The results also show that there is a positive relationship between perceived organizational support and extrinsic motivation. One determinant of employee satisfaction is the salary they take, but there are other factors also that impact their satisfaction, that are not included in pay/salary (Clark, 2015). These other factors may include the environment, support from the organization and supervisors, employee's well-being, and guidance that built their trust in the organization (Shetrone, 2011). The results proved that there is a positive relationship between extrinsic and intrinsic motivation. As a result, happy employees will be more occupied and produce better results. Further, a satisfied workforce leads to better production, performance, and prosperity for the organization (Fisher et al., 2010). The results of the study confirmed that there is a sequential relationship between perceived organizational support and job satisfaction through extrinsic and intrinsic motivation.

The findings of this study highlight the beneficial outcomes of POS for the improvement of organizational performance and effectiveness. The research emphasized the usefulness of POS and job satisfaction for strategic management in institutions, and organizations. A supportive work atmosphere enhances employees' motivation, and commitment, and plays as a catalyst for improved performance and satisfied manpower. Present research suggested quite an added perspective on how institutions can enhance the job satisfaction of employees. Previous studies also signify the contribution of the institution's atmosphere to the satisfaction of jobs (Bockerman et al., 2012; House, 2013; Ward., 2017).

Further, sequential mediation analysis recognized new factors relating to employee job satisfaction that were not previously emphasized. However, the findings of the study are not generalizable due to the small sample size and limited focus on public sector higher educational institutions. Further, data is collected as one cross-sectional point, results could face common method bias (Podsakoff, Mackenzie, & Podsakoff, 2012). For generalization of the findings of this study, future research may use longitudinal data for the improved impact of observed variables. Further, in order to develop more conclusive findings, the sample size should be extended to cover employees from diverse organizations belonging to different industries and working in different countries. The current study explored only two sequential mediators for POS and JS association. It might be possible some other variables/mediators/ moderators also have an impact on the relationship between PSO and

JS of employees, so future research for identifying more mediators and moderators is proposed.

References

Al-Alawi, A.I. (2005). Motivating factors on information technology employees in Bahrain hotel industry. *Issues in Information Systems*, 1(2), 112-115.

Asmadi, M., Kawamoto, H., & Saka, S. (2011). Thermal reactions of guaiacolsyringe as lignin model aromatic nuclei. *Journal of Analytical and Applied Pyrolysis*, 92(1), 88-98.

Athira, K., Sajeev, C. R., Sooraj, N. P., KN, S. K., & Jaishanker, R. (2016). Mapping traditional knowledge associated with Celastrus paniculatus in India using Geographical Information System (GIS). *Journal of Ayurveda Medical Sciences*, 1(2), 55-62.

Babaei, D., Rahimian, H., Ahmad, A., Omar, Z. & Idris, K. (2015). Ability mediation affects in the relationships between human resource practices and service quality. *Iranian Journal of Management Studies*, 8(1), 5-25.

Baran, B.E., Shanock, L.R., & Miller, L.R. (2012). Advancing organizational support theory into the twenty-first century world of work. *Journal of Business and Psychology*, 27(2), 123-147.

Belias, D. & Koustelios, A. (2014). Leadership and job satisfaction: a review. *European Scientific Journal*, 10 (8), 24-46.

Blau, P.M. (1964). *Exchange and Power in Social Life*, Wiley, New York, NY.

Bockerman, P., & Ilmakunnas, P. (2012). The job satisfaction-productivity nexus: A study using matched survey and register data. *ILR Review*, 65(2), 244-262.

Buitendach, J.H. & De Witte, H. (2005). Job insecurity, extrinsic and intrinsic job satisfaction, and effective organizational commitment of maintenance workers in a parastatal. *South African Journal of Business Management*, 6(2), 27-39.

Clark, A.E. (2015). *What makes a good job? Job quality and job satisfaction*. IZA World of Labor 215.

Coomber, B. & Barriball, K. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: a review of the research literature. *International Journal of Nursing Studies*, 44(2), 297-314.

Deci, E.L. & Ryan, R.M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.

Deci, E.L. & Ryan, R.M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In Ryan, R.M. (Ed.), *The Oxford Handbook of Human Motivation*, Oxford University Press, Oxford, 85-107.

Deci, E.L., Connell, J.P. & Ryan, R.M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580-590.

Deci, E.L., Koestner, R. & Ryan, R.M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627-668.

Deci, E.L., Olafsen, A.H. & Ryan, R.M. (2017). Self-determination theory in work organizations: state of the science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 19-43.

DeSantis, V.S. & Durst, S.L. (1996). Comparing job satisfaction among the public and private-sector employees. *Public Personnel Management*, 26(3), 327-343.

Eisenberger, R., Cummings, J., Armeli, S. & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812-820.

Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565-573.

Eybers, C. (2010). Coronerships in South African small and medium-sized family businesses. Unpublished doctoral thesis, Nelson Mandela Metropolitan University, Port Elizabeth.

Farrington, S.M., & Lillah, R. (2019). Servant leadership and job satisfaction within private healthcare practices. *Leadership in Health Services*, 32(1), 148-168.

Fisher, Cynthia D. (2010). Happiness at work. *International Journal of Management Review*, 12(4), 384-412.

Gagné, M. & Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behaviour*, 26(4), 331-362.

Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van den Broeck, A., Aspel, A.K., Bellerose, J., Benabou, C., Chemolli, E., Güntert, S.T. & Halvari, H. (2015). The multidimensional work motivation scale: validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology*, 24(2), 178-196.

Herzberg, F., Mausner, B. and Syndermann, B.B. (1959). *The Motivation to Work*. John Wiley & Sons, New York, NY.

Islam, R. & Ismail, A.Z.H. (2008). Employee motivation: Malaysian perspective. *International Journal of Commerce and Management*, 18(4), 344-362.

Jex, M. (2002). *Organizational Psychology: A Scientist-Practitioner Approach*, Wiley, Canada.

Kusluvan, S. (2003). *Managing Employee Attitudes and Behaviors in the Tourism and Hospitality Industry*, Nova, New York, NY.

Mui, Y.Q. (2015). *Companies have found something to give their workers instead of raises*. The Washington Post. July 28, 2015.

Nelson, D.L. & Quick, J.C. (2013). *Organizational Behavior: Science, the Real World, and You*, 8th ed., South-Western, Mason.

Nguyen, T. D. H., Maschietti, M., Åmand, L. E., Vamling, L., Olausson, L., Andersson, S. I., & Theliander, H. (2014). The effect of temperature on the catalytic conversion of Kraft lignin using near-critical water. *Bioresource Technology*, 170, 196-203.

Oswald, A.J., Proto, E., Sgroi, D. (2015). Happiness and Pink, D. H. (2011). *Drive: The surprising truth about what motivates us*. Penguin.

Prasad, D., & Ahmad, J. (2014). New electronically-controllable lossless synthetic floating inductance circuit using single VDCC. *Circuits and Systems*.

Reeser, J. C. (2005). Gender identity and sport: is the playing field level? *British Journal of Sports Medicine*, 39(10), 695-699.

Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research*, 62(10), 1027-1030.

Robbins, S.P. and Coulter, M. (2014). *Management*, 12th ed., Pearson, Boston.

Rohof, W. O., Salvador, R., Annese, V., des Varannes, S. B., Chaussade, S., Costantini, M., & Boeckxstaens, G. E. (2013). Outcomes of treatment for achalasia depend on the manometric subtype. *Gastroenterology*, 144(4), 718-725.

Ryan, R.M. & Connell, J.P. (1989). Perceived locus of causality and internalization: examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57(5), 749-761.

Ryan, R.M. and Deci, E.L. (2000a). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.

Ryan, R.M. & Deci, E.L. (2000b). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.

Ryan, R.M. & Deci, E.L. (2002). Overview of self-determination theory: An organismic dialectical perspective in Deci, E.L. and Ryan, R.M. (Eds). *Handbook of Self-Determination Research*. University of Rochester Press, Rochester, NY, 3-33.

Shetrone, A. (2011). 7 Ways to Improve Employee Satisfaction. Inc.

Steer, R.M. (1994). *Introduction to Organizational Behavior*. (4th ed.), Harper Collins Publisher, New York, NY.

Tsarenko, Y., Leo, C. & Tse, H.H.M. (2018). When and why do social resources influence employee advocacy? The role of personal investment and perceived recognition. *Journal of Business Research*, 82, 260-8.

Voon, M.L., Lo, M.C., Ngui, K.S. & Ayob, N.B. (2011). The influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia. *International Journal of Business, Management and Social Sciences*, 2(1), 24-32.

Wen, X., Gu, L., & Wen, S. (2019). Job satisfaction and job engagement: Empirical evidence from food safety regulators in Guangdong, China. *Journal of Cleaner Production*, 208, 999-1008.

Werner, A. (2011). *Organizational Behaviour: A Contemporary South African Perspective*, 3rd ed., Van Schaik, Pretoria.

Yang, Y. (2014). Principals' transformational leadership in school improvement. *International Journal of Educational Management*, 28(3), 279-288.