Perceived Organizational Support (POS) and Individual Creativity: An Intervening Role of Intrinsic Motivation among Employees of Software Houses

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Abstract. The main aim of this research was to determine the impact of perceived organizational support (POS) on employees' creativity with the mediating role of intrinsic motivation working in the Federal Capital Territory (FCT) Islamabad and Rawalpindi software houses. Data from 389 employees was gathered through the self-administrated questionnaire who were working in the software houses. Structural equational modeling was performed to assess the proposed model and results revealed that POS has a significant positive effect on employee creativity and intrinsic motivation. In addition, intrinsic motivation has a significant positive influence on employee creativity and partially mediated the association of POS and employee creativity.

Key words: Perceived Organizational Support (POS), Intrinsic Motivation, Employee Creativity

1 Introduction

In today's digitized competitive corporate environment, encouraging creativity and building a feeling of community helps stimulate creativity across multiple organizations while enhancing work productivity and minimizing turnover intentions. In particular, creativity entails the creation of fresh, practical ideas, whereas innovation entails incorporating these ideas into novel goods and procedures (Kim and Min, 2015; Lee et al., 2022). The emergence of unique and perhaps practical ideas is creativity. Shifts in the outside environment greatly impact the procedures through which innovative ideas are turned into novel products and offerings. Since it allows workers to improve company performance and explore novel procedures, approaches, or goods, organizations consider employee creativity a useful means for a competitive edge (Yuniawan et al., 2022). As a result, creativity is a crucial factor in improving organizational effectiveness (Bernarto et al., 2020). Corporations need to focus on creativity since creating a culture of creativity is a key factor in determining organizational effectiveness (Maan et al., 2020). There is a lack of studies on creativity in professional settings since it is frequently linked to artistic pursuits like cinematography, performing, sculpting, music composition, or writing books and

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literature, which seem to be leisure pursuits instead of professional ones (Li et al., 2022). In the software sector, empirical studies frequently address the demands/needs of customers/clients and normal operating activities (Fu et al., 2023; Suifan et al., 2018). Therefore, in the software houses sector, where the fulfillment of client demands/needs is crucial, it is necessary to identify the determinants of certain actions to boost workers' unique and creative behaviors and innovations. Researchers have examined factors affecting employee creative behavior (Aldabbas and Oberholzer, 2024). Currently, most software houses are facing issues with creative ideas to complete the tasks more efficiently and to get a competitive edge over their competitors. Moreover, current study highlighted the importance of POS and intrinsic motivation in generating the innovative ideas for success of organizations.

In regards to increasing employee creativity, numerous factors have been investigated, including knowledge sharing, personnel standard operating procedures, the environment for creativity, dynamic capabilities, and the perception of innovative job needs (Utomo et al., 2023). One such factor is the perceived organizational support (POS) of workers (Pan et al., 2023). The term POS is described as the relation between the workers creating global ideas and how much the firm appreciates their contributions and takes responsibility for their wellness. POS is considered a guarantee from the company that it will be there for workers when they require it to do their jobs well and handle difficult circumstances (Wijaya, 2023).

Studies have identified the value of supportive organizations in encouraging creative behavior among employees (Islam et al., 2024; Musenze and Mayende, 2023). Changes needed by creativity, such as diversity by its very essence, necessitate inclusivity, straightforwardness, and support. Businesses building an environment that encourages innovation may gain a longterm competitive edge in this area (Berg et al., 2017). Among the most important factors in any organization is motivation that encourages individuals to place forth additional effort and individual motivation is the procedure of human behavior, willingness, and level of effort by the employee to accomplish goals (Raza et al., 2023a,b). According to Akgunduz et al. (2018), workers' lives have purpose and meaning when they believe in having assistance from their employers. Workers who experience strong organizational support are, therefore, more inclined to discover value and purpose in their work. Employee motivation levels affect a company's core effectiveness and productivity as well as its ability to succeed. Contrary to demotivated workers, they do not put out an attempt to quit when given the opportunity. Similarly, too, low motivation causes an increase in staff turnover. Intrinsic motivation, which includes recognition, novel goal settings, supportive and considerate supervisor behavior, and job transition, is a component of the work that improves intrinsic worker satisfaction with their work (Zaheer et al., 2022). Wages, bonuses, promotions, and job protection are some examples of extrinsic motivation (Adekanmbi and Ukpere, 2021).

The adaptive multidimensional concept of creativity and invention emphasizes that the development of each unique idea relies mostly on its constituent parts, such as intrinsic and extrinsic motivation (Kim and Min, 2015). Employees are influenced by organizational factors such as the workplace environment, which has a subsequent impact on the complete individual creative procedure. Studies have evidence that people who experience a supportive organizational structure can effectively shift their intrinsic motivation, such as aim, purposefulness, and prosocial direction, to accomplish a goal (Zaitouni and Ouakouak, 2018). Employee creativity is therefore affected by digital transformation and advancement in applications by the organizations is necessary to sustain in market (Zaheer et al., 2024a,b,c,d). Employees who are motivated internally are more likely to conquer obstacles and deliver superior work. They take pleasure and delight in whatever they accomplish. People's intrinsic motivation to achieve a goal can

be influenced by how they feel their organization is supporting them (Sumardjo and Supriadi, 2023). Increased worker motivation and their determination to remain with the company can both be attributed to being intrinsically motivated. Each worker in every sector, including the software houses, needs to be motivated internally (Akgunduz et al., 2018; Zaheer et al., 2010). To improve employee effectiveness and organizational efficiency, the manager is required to concentrate more attention on motivating people intrinsically. Worker creativity can be influenced by an individual's intrinsic motivation to complete a task. For instance, matching questionnaires from employees and their senior managers in two multinational corporations revealed a favorable relationship between meaning and purpose in the job and worker creativity. On the other side, Akgunduz et al. (2018), carried out four studies in multiple countries and discovered that prosocial inclinations were more common than self-motivations likely explain how team members' creativity was boosted. According to Aldabbas et al. (2023), when workers feel that their employer is supporting them more, they are more motivated to participate in creative activities. However, the research evidence from the studies Akgunduz et al. (2018); Zaheer et al. (2010) does not confirm a causal link between POS and creative performance. Further sections included problem identification, problem statement, research questions, research objectives, and scope of study.

In the design and usage of software, regulating creativity has emerged as among the most crucial factors that are very challenging. Businesses such as Google and LEGO are driven by the constantly shifting market situation to emphasize creativity as an ever-increasing requirement for thriving through ongoing creativity (Kao et al., 2024). Nevertheless, most organizations particularly software houses find it difficult to be creative in the data systems context. This difficulty is principally due to a lack of understanding of how to strategically align creative activities with data systems techniques, which forces businesses to behave haphazardly in their creative endeavors. Therefore, current study discusses the organizational difficulties regarding innovation in software companies. Utilizing worker involvement, openness, honesty, risk-taking, creativity, client service improvement, and compensation systems all of which significantly contribute to the prevailing corporate culture, the different study examines the viewpoints of the workers which is also another challenge for software houses to bring. Organizational characteristics can have a big impact on how well employees behave. Establishing a connection between workers regarding the company and productivity influences workers' incentive to perform well. If the environment in a software company transforms, there will be a shift in the level of fulfillment and positive attitude towards work, which affects workers' performance.

Since the advent of the notion of creativity, various researchers have studied possible interpretations of creativity that various organizations often take into consideration (Akgunduz et al., 2018). There continues to be debate over how POS affects employee creativity. According to some researchers, businesses can boost employee creativity by fostering an environment of organizational support. On the contrary side, a different group of academics recommended that a company cannot depend on POS initiatives to boost its employee creativity. The contradictory findings of earlier research suggest that there might be a conditional connection between POS and employee creativity. Prior studies have largely concentrated on individual-level predictors of creativity but have considered professional environments that foster creativity. There is also a scarcity of literature regarding the direct impact of POS on the creativity of an employee (Arasanmi and Krishna, 2019), particularly in the context of Pakistan. Moreover, employee motivation as a whole has remained part of academic literature concerning POS and employee creativity; however, the role of intrinsic motivation in depth has not been discussed extensively. Very little research has been carried out in different countries related to the alignment of per-

ceived organization support with individual creativity in the presence of different variables but almost negligible with intrinsic motivation (Aldabbas and Oberholzer, 2024). This study highlights the mediating role of intrinsic motivation between the association of POS and employee creativity in the software houses of Pakistan.

This study provides crucial insights for professionals who want to improve employee creativity. Initially, this research would demonstrate that the crucial role of employee intrinsic motivation for creativity indicates that interventions should be created to support workers in developing their purpose and inspiring their creativity. Workers must be assisted by managers in identifying their talents, enhancing their morals, and developing their professional abilities. Additionally, this study would help policymakers take steps that must be done to assist workers in determining the purpose of their jobs (Lee et al., 2022). Furthermore, the findings of this study would imply that the treatment of people in the organization, the standard of managing people, the workplace environment, and workplace circumstances must be outlined in the firm's HR strategies given the good interactions between perceived organizational support, intrinsic motivation, and employee creativity. All of these elements may have an impact on the worker's perception of how the company views them. Material and immaterial benefits are the primary factors that influence employee participation in a company. The task becomes more fulfilling when people receive the advantages that live up to their requirements. Consequently, this study would imply that managers must develop chances that enhance the happiness and well-being of their workforce. Supervisors need to establish advancement requirements by merit, including non-material advantages, and ensure that personal abilities and jobs are comparable. Managers should develop a justified salary structure within the bounds of material aspirations. Employees who believe that their organizations support them regardless of whether they have received awards based on their productivity. To ensure that work has a purpose and worker inventiveness is promoted, management should reward people who are successful and raise POS. The outcomes of this research would show that when employment becomes more interesting, employee creativity rises as well. The main cause is that workers are motivated to develop their creativity to contribute to their work; because of this, managers ought to put policies into place that help workers attach more significance and value to their objectives and responsibilities (Pan et al., 2023). Managers can achieve this by selecting a participative approach that can facilitate the effective utilization of effective communication inside the firm and foster a sense of teamwork amongst the employees.

2 Literature Review and Hypotheses Development

2.1 Underpinning Theory

The social exchange theory of 1958 proposed by sociologist George Homans would be an underpinning theory for this research. If employees feel that the organization values them and their contributions, they tend to reciprocate by doing valuable activities (Blau, 1964). The social exchange theory (SET) underpins the association among a worker's good performance concerned conduct, such as creativity, and organizational behavior, such as organizational support (Putri et al., 2023). A cost-benefit evaluation is used by parties involved to identify the consequences and rewards of the social conduct they exhibit when interacting, according to the sociology and psychology framework known as SET. According to this concept, whenever one individual performs someone else's benefit, there is an anticipation that they will receive something later in the exchange. According to (Wang et al., 2022), SET pertains to the voluntarily taken acts of people

who are driven by the potential outcome and usually act under someone else's influence. Literature has suggested that just a small number of scholars have looked into the primary influence of trade philosophy on people's views and behaviors (Fitriyana et al., 2023). Scholars also point out that social exchange studies have not considered the interactions between people and organizations sufficiently. There are hence strong justifications for investigating the resources that are traded in various kinds of alliances (Bernarto et al., 2020). This evidence-based study will assist in determining the degree to which making investments in workers and recognizing their results in positive social interactions between workers and management. People who have been helped feel compelled to use their creativity to pay back organizations for their support (Aldabbas and Oberholzer, 2024). Workers are more likely to engage in innovative activities as a response if the pressures hint at possible rewards since impending incentives strengthen the possible reciprocal standard. Workers would not often be inventive if pressures hindered rewards. (Mora Cortez and Johnston, 2020) used SET to analyze workers' dedication to and confidence in their company. They discovered that workers who strongly believe in social exchange had increased devotion to the organization, a stronger desire to give back to the company, a stronger perception of organizational support, and reduced turnover. Workers feel increasingly compelled to participate in the company's success and assist it in achieving its objectives as their perception of the organization's support grows (Sumardjo and Supriadi, 2023). The SET transformation considers the positive externalities, emotional requirements, guidance, and knowledge transfer between the company and the worker. This idea holds that usefulness and financial considerations are the foundation for establishing and preserving ties between people. People desire to keep the advantages and business ties they sense in reciprocal connections. Individuals offer more to the organization if they believe it has strong backing (Utomo et al., 2023). POS influences an individual's intrinsic and extrinsic motivation and builds purpose, meaningfulness, and pro-social orientations to task performance at the workplace which results in employee creativity.

2.2 Perceived Organizational Support (POS) and Employee Creativity

POS is crucial to the connection between staff and employers and affects how well workers are treated and how they support organizational objectives. POS is described as a global perception of how much an organization values its employees' well-being and accomplishments (Aldabbas and Oberholzer, 2024). POS also affects mental well-being and satisfies the interpersonal needs of employees. According to (Afsar and Badir, 2017), POS would improve if the company values the efforts of its workers and meets their demands. Companies must, therefore, invest in their workforce to improve how supportive they feel, help them grow as individuals, and unlock their creative potential (Kim and Min, 2015). POS entails honoring, acknowledging, and recognizing staff members who exhibit originality and encourage their creativity to produce original ideas. According to its description, creativity is the invention of original, valuable ideas or identifying alternatives, which includes the development of helpful services, goods, and thoughts (Utomo et al., 2023). The organizational support theory (OST), on which POS is founded, highlights the necessity of considering employees as valuable organizational resources worthy of the organization's investment. Workers are motivated to cultivate favorable and creative behaviors and mindsets when they perceive strong support from their workplaces. (Lee et al., 2022). carried out a cross-sectional study to collect information from workers of 18 Korean enterprises. A favorable and considerable association between POS and employee creativity was discovered. Another research investigation by (Afsar and Badir, 2017), indicated that POS significantly and favorably influences employee creativity. POS is essential to workers' creativity

because it promotes the implementation of that creativity (Wijaya, 2023). Creative consequences are easier to attain when a business values its workers' contribution in a manner that motivates them to think outside the box and come up with fresh approaches to difficult problems. Additionally, when workers believe that their perspectives are valued by the company, they are more likely to reciprocate in a way that advances the purposes and aims of the company. POS could improve workers' understanding of how much their employer values their creativity (Musenze and Mayende, 2023). OST asserts that work engagement is increased, and various advantages can result when workers believe that their efforts are appreciated by their employer. POS improves a company's profitability by fostering each worker's perception of accountability and boosting exchange between worker and employer. Based on this review this study proposes the following hypothesis:

H1: POS has a significant positive influence on employee creativity.

2.3 Perceived Organizational Support (POS) and Intrinsic Motivation

Employee intrinsic motivation is significantly increased by POS when workers recognize their work is worthwhile. In other words, whenever individuals feel that their work has a purpose and recognition, their intrinsic motivation and inventiveness also rise. Meaning is considered to be a key element of intrinsic motivation (Sumardjo and Supriadi, 2023). According to Kuczaj et al. (2002), people who are capable and motivated enough by the supportive environment of their organizations may accomplish the objectives of their enterprises and deliver the appropriate results without the need for managerial oversight. When employees perceive that the organization in which they work provides them assistance and support and believe that their efforts are being appreciated, their intrinsic motivation is also increased. Studies have demonstrated that employee intrinsic motivation is increased by the complicated nature of the task and the support people receive from management and the organization. This assertion is corroborated by several research investigations (Kim and Min, 2015). Employee motivation is strongly influenced by how meaningful the work is perceived as a component of organizational support by workers who consider their job more efficient and significant and who trust in their abilities (Kao et al., 2024). Workers who feel constrained by a company that does not support their contributions and believes their creativity is not fostered are unable to reach their full creative power and potential. Intrinsically motivated people come up with more original ideas, display attitudes and beliefs that boost service quality, and engage in ways that support the achievement of company objectives (Akhtar et al., 2019). It has been demonstrated in several circumstances that organizational support is correlated with organizational results, such as employee motivation. Previous research demonstrates that organizational support may increase employee work motivation and personal bonds. It is expected, in line with previous studies, that organizational assistance and quality of work motivation would affect employee willingness to remain loyal to a company (Nazir et al., 2019). Based on these considerations, this study proposes the following hypothesis:

H2: POS has a significant positive influence on the intrinsic motivation of employees.

2.4 Intrinsic Motivation and Employee Creativity

Intrinsic motivation is the desire of workers to complete specific tasks according to their best interests rather than under pressure from others. According to prior studies, workers who obtain higher intrinsic motivation are more creative (Tan et al., 2019). Workers ought to be motivated to strive hard to achieve accomplishments because creativity demands a greater level of intrinsic motivation (Villanueva-Flores et al., 2023). Additionally, creative thinking is encouraged among staff members by a supportive organizational culture to complete tasks efficiently. Workers, therefore, will achieve a greater degree of intrinsic motivation, which will promote a great deal of creativity (Liu et al., 2022). Employees are encouraged to explore new cognitive avenues to achieve more creativity by their superiors when they receive help like this. In addition, intrinsic motivation continued to play a more considerable role in boosting employee creativity, and prior studies have produced conflicting conclusions. For instance, the (Maan et al., 2020). analysis revealed that intrinsic motivation had a strong impact and favorable outcomes were obtained relating to the influence of intrinsic motivation on creativity; however, the investigation did not identify any substantial or favorable outcomes. Additionally, it is asserted that although workers' behavior is influenced by contextual circumstances, their involvement in a task due to their reason fosters positivity and excitement, which in turn supports the favorable impact of intrinsic motivation (Zaheer et al., 2010).

A further point made by (Astuty and Udin, 2020), was the significance of investigating mediating roles to forecast creativity. Workers who are intrinsically motivated are more inclined to exhibit the traits that are critical to task creativity on the job, such as enthusiasm, learningseeking behavior, mental flexibility, and emotional attachment. (Fischer et al., 2020) discovered that supportive organizational structures, demanding tasks, organizational support, managerial independence, enough facilities, and independence all contribute to the development of creativity. Particularly, workplaces that support employee individuality, independence, and empowerment increase workers' degrees of intrinsic motivation, resulting in increasing their job commitment and creativity as well as decreasing burnout and turnover intention (Zaheer et al., 2010). Workers are, therefore, more likely to engage in proactive behavior and perceive problems with creative and inventive thoughts if they are intrinsically motivated by a workplace environment that fosters a supportive culture for the advancement and well-being of employees. This results in highly appreciated behavioral outcomes, including creative thinking, reliability, and understanding. A significant link between workers' intrinsic motivation and a variety of organizational results has been demonstrated in earlier research. In line with these demonstrations from the prior studies, this research proposes the following hypothesis:

H3: Intrinsic motivation has a significant positive influence on employee creativity.

2.5 Intrinsic Motivation as a Mediator

The idea behind POS shows employees' appreciation for how much their company acknowledges their efforts and is concerned about their welfare. Employees might feel obligated to compensate their employer as a result of POS. In other terms, POS is a behavioral exchange deal in which a company provides its staff with the required treatment in exchange for their feeling obligated to achieve the company's objectives (Karadas et al., 2024; Thao and Kang, 2018). As they are driven by individual interests, the effort of fixing issues and embarking on complicated situations will contain feelings of satisfaction and achievement. Individuals who are

intrinsically motivated are more likely to find creative ideas that question the power structure and promote risk-taking behavior (Zaitouni and Ouakouak, 2018). Consequently, this study argues that intrinsic motivation among workers serves as a mediator between employees' image of organizational support and their creativity. According to the social exchange theory, workers who have greater degrees of POS typically perform more effectively and creatively. By developing their specialized abilities, which form a fundamental part of creativity, individuals can improve themselves to the advantage of organizations. They might engage in other citizenship behaviors, such as seeking out "means to enhance the efficiency of their task. Even though they aren't given the responsibilities, supported workers are motivated to give back to the company and undertake initiatives that are advantageous to the company. Perceptions of responsibility, work team identity, and professional success expectations were subsequently extensively examined as three potential pathways to explain how POS fosters creativity. (Akgunduz et al., 2018), outlined several crucial elements that influence workers' creative behaviors, including POS for creative success and organizational evaluation of performance. When staff members believe that their organization is on their side, they are more creative since they perceive less threat and have greater intrinsic motivation for following the organizational strategies (Aldabbas and Oberholzer, 2024). Based on the above literature, the following hypothesis is proposed:

H4: Intrinsic motivation mediates the relationship between POS and employee creativity.

The relationship of different variables is shown in Figure 1.

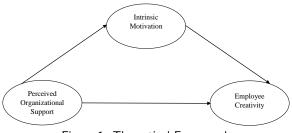


Figure 1: Theoretical Framework

3 Methodology

This research was quantitative in nature to address the issues identified in the problem statement. This planned investigation was deductive because it led to developing a hypothesis to conclusions. Data was gathered through a self-administered questionnaire from employees of the software houses located in FCT Islamabad and Rawalpindi to test the hypotheses assumed in this paper. A convenient sampling technique was used for this study and the final sample was 389. The primary rationale for utilizing a survey questionnaire is that it is more affordable than alternative approaches for quickly gathering data from a sizable population. Another reason for using this tool is that it offers more confidentiality than other analysis tools. Participants' identities were not publicly disclosed because the survey asks for demographic details like gender, experience, education, etc. Furthermore, employing the self-administered questionnaire would

effectively reduce any risk of bias because an investigator would not be involved. The 5-point Likert scale was used for all variables to collect the sample. For this purpose, Smart PLS was used to measure the effect of the independent variable on the mediator and dependent variable as well as the mediation effect of intrinsic motivation on the relationship of POS with employee creativity. The construct of POS was measured by using 8 items of (Eisenberger et al., 1986), A six-item scale of (Kuvaas and Dysvik, 2010), was used to measure intrinsic motivation. Employee creativity was measured by using a 13-items from (Zhou and George, 2001). Moreover, details of demographic characteristics are shown in Table 1.

Table 3.1: Demographic Characteristics

Characteristics	Frequency	(%)
Gender		
Female	126	32.4
Male	263	67.6
Age Group		
25 years or Under	35	9.0
26–35 years	58	14.9
36–45 years	277	71.2
More than 45 years	19	4.9
Qualification		
Undergraduate	272	69.9
Graduate / Postgraduate	117	30.1
Experience		
Less than 5 years	45	11.6
6 to 10 years	46	11.8
11 to 15 years	252	64.8
Above 15 years	46	11.8

4 Results and Discussion

Data analysis was performed through SmartPLS and loadings of all items were above 0.7 except POS3, which is excluded from the further analysis due to below 0.7 value. Items loadings of POS, intrinsic motivation, and employee creativity can be seen in Figure 2.

Moreover, Table 2 presents the details of item loadings, Cronbach's alpha, composite relia-

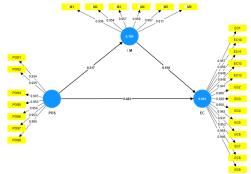


Figure 2: Structural Model (Algorithmic Analysis)

bility, and average variance extracted (AVE) of each construct. All the actual values meet the requirement of threshold values suggested by (Fornell and Larcker, 1981).

Table 4.1: Measurement Model (Estimates)

Constructs	Items	Loadings	Cronbach's	Composite	Average Variance
		_	Alpha	Reliability	Extracted (AVE)
EC	EC1	0.957	0.991	0.992	0.903
	EC10	0.956			
	EC11	0.948			
	EC12	0.948			
	EC13	0.947			
	EC2	0.960			
	EC3	0.926			
	EC4	0.958			
	EC5	0.963			
	EC6	0.931			
	EC7	0.953			
	EC8	0.955			
	EC9	0.946			
IM	IM1	0.939	0.969	0.975	0.867
	IM2	0.954			
	IM3	0.957			
	IM4	0.959			
	IM5	0.957			
	IM6	0.811			
POS	POS1	0.934	0.975	0.979	0.871
	POS2	0.935			
	POS4	0.907			
	POS5	0.953			
	POS6	0.954			
	POS7	0.953			
	POS8	0.895			

Note: EC=Employee Creativity, IM=Intrinsic Motivation, POS=Perceived Organizational Support

Furthermore, Table 3 presents (Fornell and Larcker, 1981), which also meets the threshold value.

	EC	IM	POS
EC	0.950		
IM	0.671	0.931	
POS	0.648	0.317	0.933

Table 4.2: Fornell and Lacker's criterion

Note: EC=Employee Creativity, IM=Intrinsic Motivation, POS=Perceived Organizational Support

Finally, Table 4 presents the HTMT Ratio, which also meets the threshold value.

Table 4.3: HTMT Ratio

	EC	IM	POS
EC			
IM	0.682		
POS	0.659	0.319	

Note: EC=Employee Creativity, IM=Intrinsic Motivation, POS=Perceived Organizational Support

Figure 3. presents the structural model (bootstrapping), which exhibits the path coefficient with P values and R2.

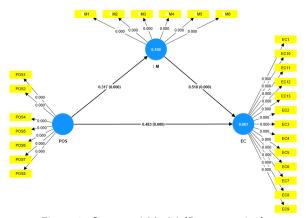


Figure 3: Structural Model (Bootstrapping)

Our first hypothesis revealed that POS has a significant positive effect on employee creativity with (β = 0.648, p < 0.001), thus it supports the H1, which is accepted as shown in Table 5. According to (Nazir et al., 2019), workers with strong POS believe in their company and take

chances since they believe that it can assist and help them if they lose or fail. Additionally, businesses that appreciate their workers' efforts and are concerned for their welfare are much more inclined to take chances due to the increased creative output by their employees. Consequently, an individual's creative output increases in proportion to the level of support they receive from their colleagues, administrators, and managers (Patnaik et al., 2023). Employees are motivated to contribute toward desired organizational results through POS because it stimulates patterns of reciprocity. High POS creates obligations for each worker to return the favor to the company (Kim and Min, 2015).

Similarly, POS has a significant positive influence on intrinsic motivation with (β = 0.317, p < 0.001), thus it supports the H2, which is accepted. Organizational commitment and employee engagement have both been linked to motivation. According to research on intrinsic motivation, there is a deep inclination to explore new opportunities and difficulties through mental development (Akgunduz et al., 2018). According to the social exchange theory, when POS promotes and encourages each worker on an individualized level, it will have an impact on the workers ' motivation to use their potential and creativity. For instance, receiving positive reviews on activities completed increases one's sense of efficacy, which strengthens intrinsic motivation (Karadas et al., 2024).

Hypotheses	Relationship	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
H1	$POS \rightarrow EC$	0.648	0.649	0.042	15.572	0.000
H2	$\text{POS} \to \text{IM}$	0.317	0.318	0.053	5.93	0.000
H3	$\text{IM} \to \text{EC}$	0.518	0.519	0.034	15.422	0.000
H4	$POS \to IM \to EC$	0.164	0.165	0.029	5.581	0.000

Table 4.4: Direct and Mediation Effects

Note: EC=Employee Creativity, IM=Intrinsic Motivation, POS=Perceived Organizational Support

Moreover, intrinsic motivation has a significant positive effect on employee creativity with (β = 0.518, p < 0.001), thus it supports the H3, which is accepted. An intrinsically motivated worker performs for self-expression, pleasure, curiosity, learning experience, or gratification of fascination instead of extrinsic incentives. This is because intrinsic motivation combines elements of challenge drive and pleasurable desire, including the fascination and pleasure of resolving difficulties and taking on challenging jobs (Zhu et al., 2020). Since they are in charge and responsible for monitoring, workers who are intrinsically motivated exhibit creative work habits, which also strengthens workers' perceptions of their creative effectiveness.

Finally, intrinsic motivation partially mediates the relationship between POS and employee creativity with (β = 0.164, p < 0.001), thus it supports the H3, which is accepted. Since POS helps employees feel encouraged by their company, it might also ease stress and motivate them to take risks while coming up with novel concepts in typically hazardous and unclear environments, which could be stressful. Additionally, POS is linked to organizational devotion and has a favorable impact on one's work. Workers who are devoted to their jobs are more inclined to be intrinsically motivated to act creatively (Sumardjo and Supriadi, 2023).

5 Conclusion and Future Recommendation

It is concluded that intrinsic motivation plays a major role among employees of software houses to enhance individual creativity. Similarly, POS also increases employee creativity but intrinsic motivation partially intervenes in the association of POS with employee creativity. Moreover, intrinsic motivation is also necessary to boost individual creativity among employees of software houses located in FCT and Rawalpindi. Organizations should take measures in support of employees to increase intrinsic motivation and individual creativity for sustainable performance in the long run. In the future, researchers should focus on different variables to enhance employee motivation and creativity within different industries with different regions and jurisdictions.

References

- Adekanmbi, F. P. and Ukpere, W. (2021). Self-efficacy and social adjustment as predictors of achievement motivation among bank employees. *Banks and Bank Systems*, 16(2):190–199.
- Afsar, B. and Badir, Y. (2017). Workplace spirituality, perceived organizational support and innovative work behavior: The mediating effects of person-organization fit. *Journal of workplace Learning*, 29(2):95–109.
- Akgunduz, Y., Alkan, C., and Gök, Ö. A. (2018). Perceived organizational support, employee creativity and proactive personality: The mediating effect of meaning of work. *Journal of Hospitality and Tourism Management*, 34:105–114.
- Akhtar, P., Frynas, J. G., Mellahi, K., and Ullah, S. (2019). Big data-savvy teams' skills, big data-driven actions and business performance. *British Journal of Management*, 30(2):252–271.
- Aldabbas, H. and Oberholzer, N. (2024). The influence of transformational and learning through r&d capabilities on the competitive advantage of firms. *Arab Gulf Journal of Scientific Research*, 42(1):85–102.
- Aldabbas, H., Pinnington, A., and Lahrech, A. (2023). The influence of perceived organizational support on employee creativity: The mediating role of work engagement. *Current psychology*, 42(8):6501–6515.
- Arasanmi, C. N. and Krishna, A. (2019). Employer branding: perceived organisational support and

- employee retention—the mediating role of organisational commitment. *Industrial and Commercial Training*, 51(3):174–183.
- Astuty, I. and Udin, U. (2020). The effect of perceived organizational support and transformational leadership on affective commitment and employee performance. *The Journal of Asian Finance, Economics and Business*, 7(10):401–411.
- Berg, J., Osher, D., Same, M. R., Nolan, E., Benson, D., and Jacobs, N. (2017). Identifying, defining, and measuring social and emotional competencies.
- Bernarto, I., Berlianto, M. P., Meilani, Y. F. C. P., Masman, R. R., Suryawan, I. N., et al. (2020). The influence of brand awareness, brand image, and brand trust on brand loyalty. *Jurnal Manajemen*, 24(3):412–426.
- Blau, P. M. (1964). Justice in social exchange. *Sociological inquiry*, 34(2).
- Eisenberger, R., Huntington, R., Hutchison, S., and Sowa, D. (1986). Perceived organizational support. *Journal of Applied psychology*, 71(3):500.
- Fischer, M., Imgrund, F., Janiesch, C., and Winkelmann, A. (2020). Strategy archetypes for digital transformation: Defining meta objectives using business process management. *Information & Management*, 57(5):103262.
- Fitriyana, A., Prahiawan, W., and Kambara, R. (2023). The influence of organizational culture and intrinsic motivation on employee performance through organizational commitment as an intervening variable. *Management Science Research Journal*, 2(1):46–63.

- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1):39–50.
- Fu, L., Shi, Y., Yang, X., and Zhang, W. (2023). Enterprise resilience to the covid-19 pandemic: The role of business environment. *Plos one*, 18(8):e0288722.
- Islam, M. T., Hasan, M. M., Redwanuzzaman, M., and Hossain, M. K. (2024). Practices of artificial intelligence to improve the business in bangladesh. Social Sciences & Humanities Open, 9:100766.
- Kao, L.-J., Chiu, C.-C., Lin, H.-T., Hung, Y.-W., and Lu, C.-C. (2024). Unveiling the dimensions of digital transformation: A comprehensive taxonomy and assessment model for business. *Journal* of Business Research, 176:114595.
- Karadas, G., Vatankhah, S., Ozturk, A., and Altun, O. (2024). The mediating role of thriving at work between organizational inducements and work outcomes. *International Social Science Journal*, 74(252):731–749.
- Kim, S. K. and Min, S. (2015). Business model innovation performance: When does adding a new business model benefit an incumbent? *Strategic Entrepreneurship Journal*, 9(1):34–57.
- Kuczaj, S., Lacinak, T., Fad, O., Trone, M., Solangi, M., and Ramos, J. (2002). Keeping environmental enrichment enriching. *International Journal of Comparative Psychology*, 15(2).
- Kuvaas, B. and Dysvik, A. (2010). Exploring alternative relationships between perceived investment in employee development, perceived supervisor support and employee outcomes. *Human resource management journal*, 20(2):138–156.
- Lee, C. K., Wiklund, J., Amezcua, A., Bae, T. J., and Palubinskas, A. (2022). Business failure and institutions in entrepreneurship: A systematic review and research agenda. *Small Business Economics*, 58(4):1997–2023.
- Li, G., Xue, J., Li, N., and Ivanov, D. (2022). Blockchain-supported business model design, supply chain resilience, and firm performance.

- Transportation Research Part E: Logistics and Transportation Review, 163:102773.
- Liu, Y., Dilanchiev, A., Xu, K., and Hajiyeva, A. M. (2022). Financing smes and business development as new post covid-19 economic recovery determinants. *Economic Analysis and Policy*, 76:554–567.
- Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., and Ahmed, S. (2020). Perceived organizational support and job satisfaction: a moderated mediation model of proactive personality and psychological empowerment. *Future Business Journal*, 6:1–12.
- Mora Cortez, R. and Johnston, W. J. (2020). How to recover b2b relationships after a failed online reverse auction. *Journal of Business & Industrial Marketing*, 35(3):551–563.
- Musenze, I. A. and Mayende, T. S. (2023). Ethical leadership (el) and innovative work behavior (iwb) in public universities: examining the moderating role of perceived organizational support (pos). *Management Research Review*, 46(5):682–701.
- Nazir, S., Ali, Y., Ullah, N., and García-Magariño, I. (2019). Internet of things for healthcare using effects of mobile computing: a systematic literature review. *Wireless Communications and Mobile Computing*, 2019(1):5931315.
- Pan, L., Xu, Z., and Skare, M. (2023). Sustainable business model innovation literature: a bibliometrics analysis. *Review of Managerial Science*, 17(3):757–785.
- Patnaik, A., Pawar, A., and Panda, A. (2023). Assessment of knowledge management in small businesses: The examination of support, rewards, and empowerment in organisations. In INDAM: Indian Academy of Management at SBM-NMIMS Mumbai, pages 405–424. Springer.
- Putri, D. K. A., Hartono, A., et al. (2023). Training, leadership style, and work environment on employee performance: the role of work motivation. *Jurnal Fokus Manajemen Bisnis*, 13(2):197–214.

- Raza, M., Khalique, M., Khalid, R., Kasuma, J., Ali, W., and Selem, K. M. (2023a). Achieving smes' excellence: scale development of islamic entrepreneurship from business and spiritual perspectives. *Journal of Islamic Accounting and Business Research*.
- Raza, M. A., Zaheer, M. A., Mohsin, A., Chaudhary, S. I., Ejaz, R., and Khan, Z. (2023b). Enhancing mnc performance in emerging nations: an integrated model of training and development, role clarity, motivation and leadership. *International Journal of Organizational Leadership*, 12(First Special Issue 2023).
- Suifan, T. S., Abdallah, A. B., and Al Janini, M. (2018). The impact of transformational leadership on employees' creativity: The mediating role of perceived organizational support. *Management Research Review*, 41(1):113–132.
- Sumardjo, M. and Supriadi, Y. N. (2023). Perceived organizational commitment mediates the effect of perceived organizational support and organizational culture on organizational citizenship behavior. *Calitatea*, 24(192):376–384.
- Tan, B. L., Tan, C. L., Yeo, S. F., and Ching, S. L. (2019). Examining the business venture success of restaurants: The role of innovation capability as a mediator. *Jurnal Pengurusan*, 55:179–192.
- Thao, N. P. H. and Kang, S.-W. (2018). Servant leadership and follower creativity via competence: A moderated mediation role of perceived organisational support. *Journal of Pacific Rim Psychology*, 12:e32.
- Utomo, H. J. N., Irwantoro, I., Wasesa, S., Purwati, T., Sembiring, R., and Purwanto, A. (2023). Investigating the role of innovative work behavior, organizational trust, perceived organizational support: an empirical study on smes performance. *Journal of Law and Sustainable Development*, 11(2):e417–e417.
- Villanueva-Flores, M., Hernández-Roque, D., Díaz-Fernández, M., and Bornay-Barrachina, M. (2023). Exploring the mediation role of perceived behavioural control and subjective norms in the relationship between psychological capital and entrepreneurial intention of university students. *The International Journal of Management Education*, 21(3):100865.

- Wang, X., Lin, X., and Shao, B. (2022). How does artificial intelligence create business agility? evidence from chatbots. *International journal of in*formation management, 66:102535.
- Wijaya, E. (2023). The role of perceived organizational support (pos) and innovative work behavior (iwb) on smes performance with organizational trust as mediation variable. *International Journal of Social and Management Studies*, 4(1):61–71.
- Yuniawan, A., Mas'ud, F., and Ratnawati, I. (2022). The effect of spiritual leadership, organizational support, and islamic work ethic. In 19th International Symposium on Management (INSYMA 2022), pages 504–510. Atlantis Press.
- Zaheer, A., Gözübüyük, R., and Milanov, H. (2010). It's the connections: The network perspective in interorganizational research. *Academy of management perspectives*, 24(1):62–77.
- Zaheer, M. A., Anjum, T., Díaz Tautiva, J. A., and Heidler, P. (2024a). Digital transformation of enterprises to enhance sustainability: how does the reputation of digital applications influence the attributes of e-commerce. *Sustainability*, 16(17):7365.
- Zaheer, M. A., Anwar, T. M., Iantovics, L. B., Manzoor, M., Raza, M. A., and Khan, Z. (2024b). Decision-making model in digital commerce: electronic trust-based purchasing intention through online food delivery applications (ofdas). *Journal of Trade Science*, 12(3):220–242.
- Zaheer, M. A., Anwar, T. M., Iantovics, L. B., Raza, M. A., and Khan, Z. (2024c). Enticing attributes of consumers' purchase intention to use online food delivery applications (ofdas) in a developing country. *Journal of Electronic Business & Digi*tal Economics, 3(3):295–317.
- Zaheer, M. A., Anwar, T. M., Khan, Z., Raza, M. A., and Hafeez, H. (2024d). How do strategic attributes of electronic commerce impel the perceived value and electronic loyalty of online food delivery applications (ofdas). *Journal of In*novative Digital Transformation, 1(1):48–67.

- Zaheer, M. A., Chaudhary, S. I., Khan, Z., and Ullah, K. (2022). When knowledge workers suffer: How affective commitment and sexual harassment from pupil on educators tie with burnout. *South Asian Review of Business and Administrative Studies (SABAS)*, 4(2):95–102.
- Zaitouni, M. and Ouakouak, M. L. (2018). The impacts of leadership support and coworker support on employee creative behavior. *International Journal of Productivity and Performance Management*, 67(9):1745–1763.
- Zhou, J. and George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management journal*, 44(4):682–696.
- Zhu, Z., Zhao, J., and Bush, A. A. (2020). The effects of e-business processes in supply chain operations: Process component and value creation mechanisms. *International journal of information management*, 50:273–285.