

## Examining The Impact Of Operational Strategy And Employee Motivation On Project Performance In The Construction Projects

Gohar Fareed <sup>(1)</sup> Muhammad Javid Nawaz <sup>(2)</sup> Shakir Iqbal <sup>(3)</sup> Umme Ummara <sup>(4)</sup> Ameer Hamza <sup>(5)</sup>

### Abstract

*Continuous performance management through monitoring and evaluation techniques plays an essential role in attaining success in the project. To enhance project performance, the manager must create a positive work environment and do more than work within predefined project management constructs. The purpose of this study was to investigate the impact of the motivation of employees on project performance. A primary and quantitative study was held to identify the relationship between the variables (e.g., motivation, project performance, and operational strategy). We distributed questionnaire surveys to units of analysis; they helped us select the best sample from our selected Bahawalpur, Multan, Lahore and Faisalabad region Projects. The data was collected through questionnaires by interviewing the 210 project workers and managers using convenience sampling. The data were analyzed through SPSS and Smart PLS. Statistical results such as Descriptive Analysis, Regression Analysis, Moderating Analysis, and Boot Strapping were used to establish the relationship between variables and Cronbach Alpha to measure the scale reliability. The results show that the worker's motivation has a significant positive effect and is essential in increasing the project's performance. Operational strategy as a moderator has a significant positive impact on project performance. This study is critical because it provides practical insights regarding the most important factors. In this study, we discuss the factors that affect worker performance and find the factors related to the worker to achieve the project performance. The conclusion supports that workers' motivation enhances the project's performance.*

**Keywords:** Motivation of worker, Project performance, and Operational strategy.

### Introduction:

The impact of operational strategy and employee motivation on project performance in construction projects is a complex and multifaceted issue. Hajiali (2022) found that work motivation, leadership style, and competence have a significant impact on job satisfaction, which in turn affects employee performance. According to Noorzai (2022) identified "Daily

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<sup>(1)</sup> MS Scholar, Department of Mechanical Engineering and Technology, Institute of Southern Punjab Multan, Punjab, Pakistan

<sup>(2)</sup> Visiting Faculty, Department of Project & Operation Management, Institute of Business Management & Administrative Sciences, The Islamia University of Bahawalpur, Punjab, Pakistan (Corresponding Author)

<sup>(3)</sup> Lecturer, Department of Management Sciences, Abasyn University, Peshawar, Pakistan.

<sup>(4)</sup> PhD Scholar, University of Karachi, Department of international relations.

<sup>(5)</sup> MS Scholar, Department of management sciences, Shaheed zulfikar Ali bhutto institute of science and technology, Islamabad, Pakistan.

Huddle Meetings" as the most effective lean technique for improving success factors in the construction phase, with efficient construction management being a critical factor. According to Memon (2023)

highlighted the importance of job satisfaction in the construction industry, with a focus on identifying factors and evaluating the relationship between job satisfaction and employee performance. Khan (2023) emphasized the role of employee motivation in organizational productivity, particularly the impact of teamwork on employee performance. These studies collectively underscore the importance of a holistic approach that considers both operational strategy and employee motivation in enhancing project performance in construction projects.

Skilled managers can manage resources and complete projects on time and within budget (Standards & Publications of Project Management Institute 2010). PMP programs from the Project Management Institute (PMI) helped train and certify such individuals. The PMI has 1,036,367 active PMP-certified professional managers who have passed the PMBOK-based test (Standards & Publications of Project Management Institute 2010). Working out to execute plans appropriately puts skilled project managers in demand. Resource allocation, budget, feasibility, and supremacy determine projects. A project manager may be able to lead a team through multiple project phases and life cycles, but employee motivation, which is harder to quantify, is essential to a successful project (Globerson2002).

The problem statement addresses building project team motivation. This study will examine how conflicting interests and attentional demands affect construction project team performance. It will also examine how motivation influences project team performance. Analysis of this subject deserves greater attention. Although team members' motivation levels considerably affect their performance, it is as important to study how motivation affects project outcomes. Project success depends on team performance.

Developing nations emphasize employee motivation. Project workers in our region need greater motivation. Its main goal is to determine how motivated personnel affect project performance. Project managers may wonder, "How do I encourage my team members?" in appealing troublesome or composite developments. Interestingly, questions suggest staging the inquiry better. An investigative education that plotted 135,000 workers in 40 companies found that "most people enter a new company and find jobs with enthusiasm." They worked, contributed, and took pride in their work and organization. Investigate inclinations and focus on certain side activities or parts, not motivation (Ambrose1999).

From the point of view of theory, we agreed that further research is needed to better understand the relationship between project worker motivation and project performance in the Bahawalpur region. We incorporate a moderating variable. Our study is innovative due to its operational strategy. There should be more research on this topic. There has been no research on this variable from the perspective of project performance in the Bahawalpur region. This study will be used as a guideline for future investigations concentrating on the same perspective.

From a point of view of practicality, this study will address the needs of practitioners. Much research on this subject has been undertaken in other industrialized countries, but the issue has yet to be addressed in the Bahawalpur region. Workers in our region could be more motivated to complete their projects. A project manager must learn how to encourage project workers so that the project may move forward efficiently. This study is crucial since it provides practical information on the most important aspects. In this study, we analyze the elements that influence

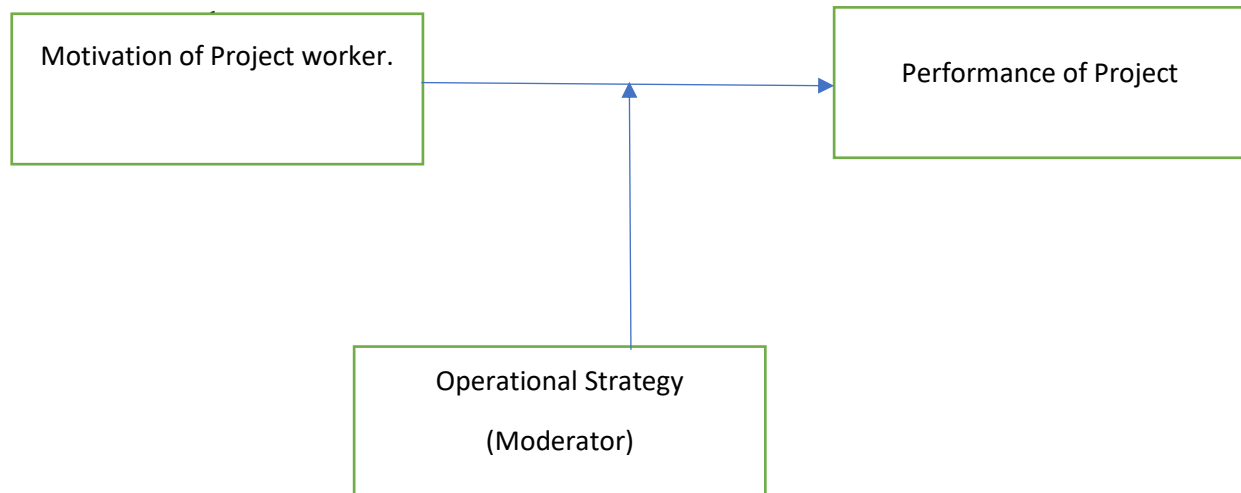
worker performance and identify the factors that help workers achieve project performance. It also improves workers' performance on the project.

Variable	Source	Definition
Motivation of Project worker.	(Lindnir, 1998)	Motivation is the intrinsic drive that compels individuals to achieve personal and organizational objectives.
Project performance	(Verbancu ,2005)	A specific outcome is achieved in management, which demonstrates characteristics of competitiveness, efficiency, and effectiveness of the organization and its procedural and structural elements.
Operational strategy	(Nigeil Slack ,2011)	Operations strategy refers to the comprehensive set of decisions that determine the long-term capabilities of an operation and its role in the overall plan.

Table 1. 1 Definition of key terms

**Theoretical Framework:**

It's all about the equivalence of workers if there is no equal right within the organization they will never motivate for work.



## Literature Review

### Performance of Project:

Regulatory practicality and excellent planning are hallmarks of project organization. Management teams should provide rigorous project management to boost performance (Larsson, Eriksson, and Pesämaa 2018). Through secondary employee well-being and presentation, high-quality employee motivation helps an organization succeed (Jabagi et al., 2019). The organization determines causal links between goals and success strategies (Richards 2007).

Project performance and corporate competition can be improved by project management competency training for employees and additional staff (Lin 2021). Project success factors have been studied by academics and industry specialists. Most identified determinants focus on project execution, not organizational performance. (Cooke-Davies 2002). Successful project management drives organizational performance (Pinto & Covin, 1989).

Motivation is a management strategy that offers unmet needs-based incentives to employees to perform harder for the company's benefit. Environment, capital, and people affect organization performance. Human resources affect the organization's performance most. Thus, it is reasonable to argue that an organization should drive its people to achieve its goals (Johnsson, 2016). Employee motivation for good performance requires excellent performance management. Effective performance management requires more. The most important aspect of any performance management system is how managers and employees use it (Pulakos, 2009).

Management teams should manage projects rigorously to improve performance. Thus, it can be used in other project-oriented or state settings, but more research is needed. Ignoring team motivation can hurt project performance (Larsson et al., 2018). E-commerce and outside motivations improve job performance and project management efficiency (Lin, 2021b). Through secondary employee well-being and presentation, high-quality employee motivation helps an organization succeed. Companies should motivate workers in unusual work contexts more. Motivation boosts gig economy worker performance (Jabagi et al., 2019).

H1: Motivation of workers positively affects to increase project performance.

### Motivation of Project Worker

Construction enterprises and firms are interested in the motivational elements that impact project performance for project managers. The significance of motivation perspectives in developing project directors in Jordan. The six motivational dimensions are communication, work, normal waged situations, enablement, individual growth, and reward (Shurab, Abbasi & Al Khazaleh 2018). The study by Sramov Rosnegel and Hertel (2010) presents a framework that combines theoretical concepts and empirical data to evaluate motivation levels related to age and identify factors that may hinder motivation in projects. Effective employee motivation plays a crucial role in the sustained success of an organization by positively impacting worker satisfaction and performance (Jobgi et al., 2019). Furthermore, the researchers noted that project workers with greater expertise are more motivated by authorization (Shurab, Abbasi & Al Khazaleh 2018).

Organizations that have achieved consistent success set themselves apart by prioritizing the individual employee and fostering the growth of internal drive. The distinction between an extrinsically motivated employee and an intrinsically motivated employee is in the source of their motivation. An extrinsically motivated employee is driven by external factors such as rewards, recognition, or incentives. On the other hand, an intrinsically motivated employee is motivated by internal factors such as personal satisfaction, enjoyment, or a sense of purpose. They explain:

Intrinsic motivation refers to individuals engaging in an activity due to their interest and experiencing immediate gratification from the activity itself. Extrinsic motivation, on the other hand, relies on a connection between the activity and external outcomes, such as physical or verbal rewards. In this case, satisfaction does not stem from the activity itself, but rather from the external consequences that result from the activity (Schmid & Adams, 2008).

The professional stage is not determined by intrinsic motivations, although their interrelationships are fully elucidated (Duarte and Lopez 2018). The study conducted by Lee and Kulvivat (2008) examined the impact of loyalty-based promises and work motivation on job outcomes, highlighting the interconnectedness of promise, inspiration, and productivity. Extrinsic motivation is the antithesis of intrinsic motivation, as it involves performing actions to obtain an external reward. An individual's physical environment is the origin of the extrinsic drive. Job benefits, high pay, incentives, and promotions are examples of rewards that might result in extrinsic motivation (Johnsson, 2016).

H2: Operational strategy as a moderator positively impacts the worker's motivation.

### **Moderating role of Operational Strategy:**

Operational strategy is the set of decisions that shape an operation's long-term capabilities and contribution to the broader strategy (Nigel Slack and Michael Lewis). Operational excellence, attention to detail, gradual change, and long-term experimentation have traditionally yielded the best business strategy results (Jelassi 2008). Knowledge management-based systems' efficiency and best practices for solving organizational operational difficulties. Organizational performance, innovation, and growth have improved with operational strategies and methodologies (Ochieng et al., 2018).

Delays and escalating project expenses cause working and financial losses. In a manufacturing-friendly atmosphere, it also elevates administration (Rawat, Gupta & Rao 2021). All initiatives with high-level operational strategy business concerns or operation managers require certain requirements for success (Longman and Mullins 2004). Knowledge management systems' efficiency and best practices for operational problem-solving Strategies and procedures promote project performance, innovation, and growth (Ochiang et al. 2018). Learning and development specialists at multinational, SME, public sector, and non-profit organizations in Ireland have strategic and operational roles in the UK, Europe, and the US (Garavan et al. 2020).

Operational excellence is a workplace philosophy that emphasizes problem-solving, teamwork, and leadership to improve the organization, focus on performance and needs, empower employees, and improve workplace performance (Rahman et al., 2018). Operational strategy is crucial to production efficiency and cost savings. It also offers competitive advantages such as speedy new product development, product quality and defect reduction, job safety, and customer-focused production (Lee, 2021).

All plans include many development-related factors. The operational duties of development experts in multinational enterprises' operational management affect project performance and are treated differently. We'll see if our moderator's response to the project's performance improves it.

H3: Operational strategy as a moderator impact positively to increase project performance.

### **Research Methodology:**

In this chapter, we discuss the research methods followed in the study. It provides information on the participants, including the study's inclusion criteria, who the participants are, and how they were sampled. The equipment used to gather data is also detailed, as are the managerial and worker level employees to conduct this study. We also go over the ways of analyzing the data. Finally, the ethical considerations that were considered during the procedure are highlighted.

### **Research design:**

We examine data collection and analysis in construction research design. We utilize a deductive technique because it always starts with a theory to investigate the relationship between project worker motivation and project performance with Operational Strategy as a moderator. This study focuses on data collection. This study used the best five-point Likert scale for its survey. We employed simple convenience sampling in this investigation. Hypotheses were tested with SPSS and Smart PLS.

### **Population and sample of study:**

The population of the current study consists of project managers and staff who have adopted operational projects. The primary objective was to examine the factors that influence project performance. The participants in this study were individuals currently employed as workers, operational managers, or project managers in the target regions of Bahawalpur, Multan, Lahore, and Faisalabad. Before determining the sample size, it is essential to know the population.

### **Sample size:**

The sample size is the factor of population. We cannot study the entire population, so an accurate sample size is necessary to simplify the population's results. In the current study, our population region is Bahawalpur, Multan, Lahore and Faisalabad, which is why the Management level and workers of the project collected data for the questionnaire. In the current study data, the collection method response might need improvement and be more challenging due to unresponsive and non-disclosing behavior in human capital. Overall, we distributed 250 questionnaires physically in our Bahawalpur, Multan, Lahore and Faisalabad region's construction areas (Khawam and Bostain 2019).

Many sampling methods exist, but this study used convenience sampling since researchers randomly selected respondents from a convenient pool. This sampling method covers Bahawalpur, Multan, Lahore, and Faisalabad. Data was collected via questionnaires. Surveys

were sent to units of analysis to help us choose the finest sample from our Bahawalpur, Multan, Lahore, and Faisalabad projects.

Table -2 Source table.

Variable	Adopted from	Used Scale
Performance of Project	(Lu et al., 2019)	5 Likert scale
Motivation of Project Worker	(Johnson, 2005)	5 Likert scale
Operational Strategy	(Kipngetich, 2016)	5 Likert scale

**Data analysis:**

Two statistical packages, SPSS and SMART PLS, were utilized to conduct reliability, confirmatory factor analysis (CFA), correlation, and regression investigations, as well as descriptive statistics. The SPSS programme was additionally employed for the investigation of demographic analysis. In order to evaluate the viability of a 4-component model, the findings of a confirmatory factor analysis based on SMART PLS were reported in the next chapter. Since SMART PLS is a trustworthy method for producing reliable estimates, it was employed to conduct the multiple regression analysis of dependent and independent variables. Utilizing the SMART PLS methodology, a research on mediation and moderation was also conducted.

**Descriptive analysis:**

Project participants' data is quantified. This division helps understand respondent histories and personalities. Quantitative data (mean, standard deviation, etc.) on worker motivation, project performance, and operational strategy are also provided. Tables for each demographic characteristic follow. Descriptive statistics on tabular data produced this study's variables' means and standard deviations.

Table -3 Descriptive analysis

category	option	Cumulative			
		Frequency	Percent	Valid Percent	Percent
gender	Male	183	87.1	87.1	87.1
	Female	27	12.9	12.9	100
age	18 to 25				
	Years	40	19.0	19.0	19.0
	26 to 33				

	years	118	56.2	56.2	75.2
	34 to 42				
	years	39.0	18.6	18.6	93.8
	43 and above	13.0	6.2	6.2	100
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education	Bachelors	115	54.8	54.8	54.8
	Master	12	5.7	5.7	60.5
	MS/MPHIL	76	36.2	36.2	96.7
	PhD	07	3.3	3.3	100
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experience	Less than 5 years	25	11.9	11.9	11.9
	6-10 Years	118	56.2	56.2	68.1
	11-15 years	48	22.9	22.9	91.0
	16-20 years	12	5.7	5.7	96.7
	Above 20 years	7	3.3	3.3	100
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The poll samples men and women from Pakistani project-based enterprises. Table 1 shows our sample gender distribution. 183 men and 27 women were surveyed. Men dominate the audience. Demographic age matters. The project-based organisation collected data from four age groups. Table 2 shows the sample age distribution. 19% were 18–25, 56.2% 26–33, 18.6% 34–42, and 6.2% 43+. 26–33-year-olds reply most. Each participant's eligibility is listed below. Table 4 shows that 54.8% of 210 respondents had a bachelor's degree or higher, 5.7% had a master's, 36.2% had an MS/MPhil, and 3.3% had a PhD. Table 3 shows that many single males answered. Demographic analysis requires knowledge of project-based workers' backgrounds. Quality of respondents and knowledge obtained from their comments. The majority of respondents (56.2%) had employment histories of five years or more, as shown in the table below (6-10 years). 22.9% of 11–15-year-olds have industry experience. 5.7% of 16–20-year-olds responded. 3.3% reported 20+ years of experience.

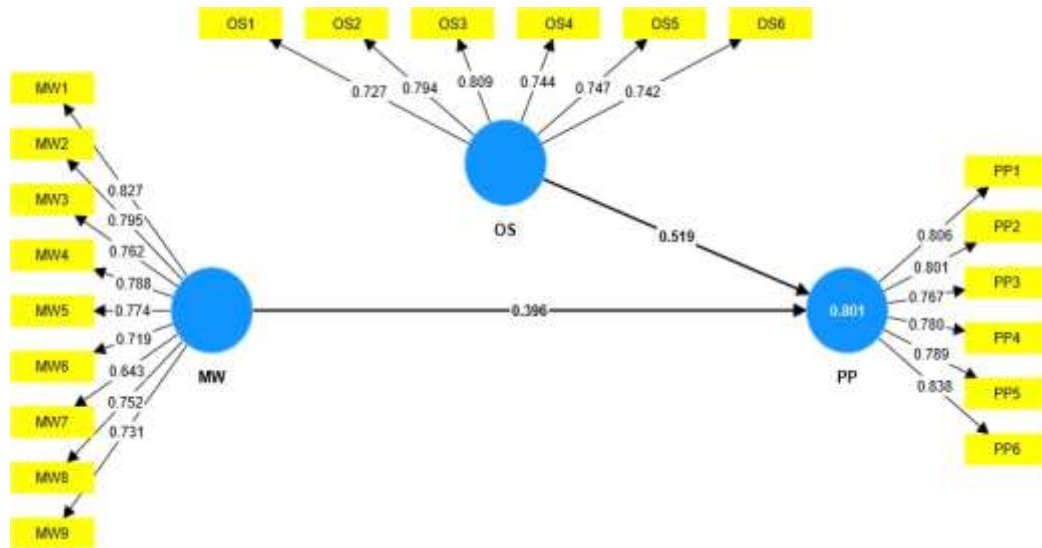
#### **Table-4 Confirmatory factor Analysis**



<b>Variables</b>	<b>Items</b>	<b>Loadings</b>	<b>A</b>	<b>C R</b>
<b>Motivation Of Project Worker</b>	MW1	0.827	0.905	0.909
	MW2	0.795		
	MW3	0.762		
	MW4	0.788		
	MW5	0.774		
	MW6	0.719		
	MW7	0.643		
	MW8	0.752		
	MW9	0.731		
<b>Operational Strategy</b>	OS1	0.727	0.854	0.856
	OS2	0.794		
	OS3	0.809		
	OS4	0.744		
	OS5	0.747		
	OS6	0.742		
<b>Performance Of Project</b>	PP1	0.806	0.885	0.886
	PP2	0.801		
	PP3	0.767		
	PP4	0.780		
	PP5	0.789		
	PP6	0.838		

Confirmatory factor analysis examined scale subjective validity. CFA is an advanced statistical approach used in many studies to examine variable connections. This method increases the number of scales for each variable in the study. The next paragraphs discuss the outcomes according to the relevant criteria. Fornell and Larcker (1981) stated that these questions should have been retained due to poor factor loading because they all had 0.6.

Table 1 shows how Cronbach's alpha calculates developing and composite dependability.



**Table-5 Discriminant Validity:**

	Motivation of Project worker	Operational Strategy	Performance of Project
Motivation of Project worker	0.756		
Operational Strategy	0.740	0.735	
Performance of Project	0.724	0.702	0.695

The research uses discriminant validity to verify that variables are different. To protect the research, we computed the discriminant validity of each measure independently better to understand the differences in perceptions of the four variables. Table 2's Fornell-Lacker criterion indicates that all relevant variables must be less than 0.85 to identify an appropriate HTMT threshold. This study seeks the best discriminant validity threshold.

**Table-6 Correlation Analysis**

	1	2	3
1. Motivation of Project worker	1		
2. Operational Strategy	0.912**	1	

3. Performance of Project	0.869**	0.880**	1
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There was a highly substantial relationship between all theoretical factors. Motivation among workers was found to significantly correlate with both operational strategy and project performance ( $r=.912^{**}$ ,  $p.01$ ) and ( $r=.869^{**}$ ,  $p< .01$ ). Operational strategy was found to be substantially connected with Project performance ( $r=.880^{**}$ ,  $p.01$ ).

Moderation regression analysis (Liu et al., 2003) evaluates the connection between the IV and DV. In this study, moderating regression analysis was conducted using Smart PLS. This investigation reveals the strength or weakness of the connection between IV and DV. The operational strategy is addressed as a moderator in this research since it is crucial to understanding the relationship between worker motivation and project performance. The operational strategy positively impacted project performance, as shown by the analysis ( $= 0.649$ ,  $p =.000$ ). Moreover, the moderating effect of the operational strategy is also positively significant ( $= 0.517$ ,  $p =.000$ ). The hypothesis is so accepted.

Table-7 Moderated Regression Analysis

	Original sample(O)	Sample Mean	SD	T	P
MW→PP	0.667	0.659	0.076	18.042	0.000
OS→PP	0.649	0.612	0.061	15.640	0.000
Moderating Effect →PP	0.517	0.498	0.054	11.317	0.000

N = 210. SD= Standard Deviation, MW = Motivation of worker, PP= Project Performance, and OS= Operational Strategy.

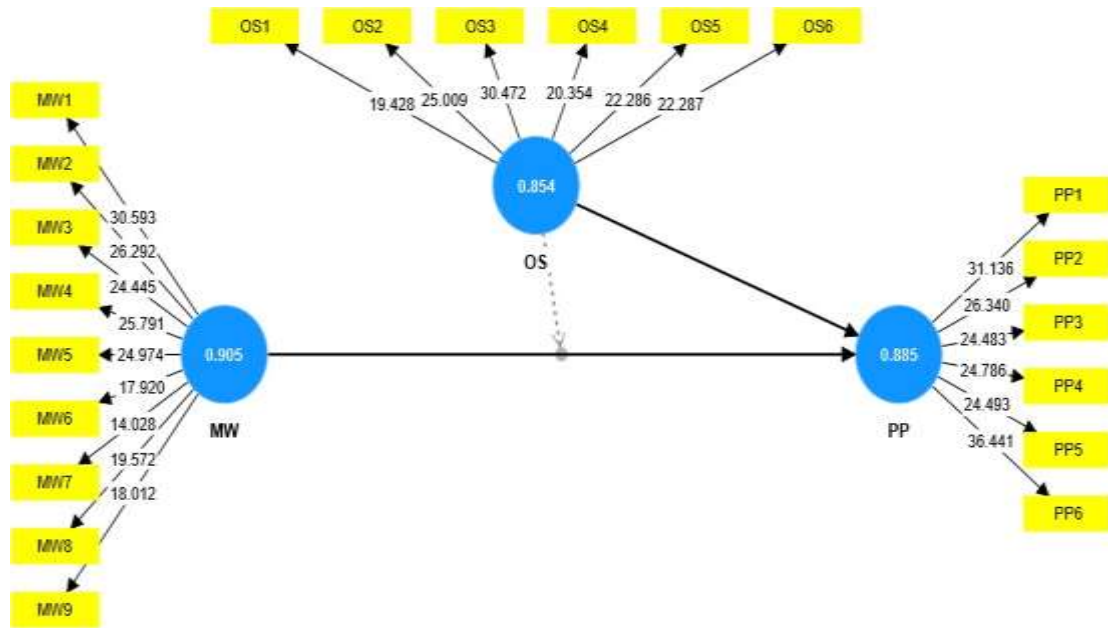


Table-8 Summary of accepted and rejected hypothesis:

This study's primary objective is to investigate the connection between worker motivation, operational strategy, and project performance. This investigation contains three hypotheses, the outcomes of which are presented in the table below.

Hypothesis	Relationship	Original sample mean	Sample mean	SD	T	P	Status
H1	MW→PP	0.667	0.659	0.076	18.042	0.000	Accepted
H2	OS→PP	0.649	0.612	0.061	15.640	0.000	Accepted
H3	Moderating Effect →PS	0.517	0.498	0.054	11.317	0.000	Accepted

N = 210. SD= Standard Deviation, MW = Motivation of worker, PP= Project Performance, and OS= Operational Strategy.

**Discussion:**

This study examined workers' motivation on project performance in Bahawalpur, Multan, Lahore, and Faisalabad with operational strategy as a moderator. Results from this project will help address research questions. Every study's research question has a hypothesis.

H1 is the first hypothesis about project performance and worker motivation. This study predicts H1 support. Previous research confirms that worker motivation affects performance (Catherine R. Johnson, 2005). Hypothesis H1 identified a substantial link between worker motivation and performance.

H2 represents the second operational strategy and worker motivation hypothesis. This study predicts H2 support. Studies show that operations strategy affects project performance (Rawat, Gupta & Rao 2021). The result of hypothesis H2 is significant for worker motivation.

H3 is the third operational strategy and project performance hypothesis. The study predicts H3 support. Previous research confirms that operations strategy affects project performance (Onesmus 2016). Hypothesis H3 shows a considerable operational strategy-performance link.

### **Implication of the study:**

The findings of the present investigation uncover various theoretical and practical ramifications. An example is analyzing the dynamic interaction between several factors that influence project performance using moderation analysis in building projects.

Moreover, this research is the inaugural study conducted in Bahawalpur, Multan, Lahore, and Faisalabad regarding Construction projects. This study examines characteristics connected to motivation, specifically focusing on the motivation of workers involved in projects.

Moreover, this study investigates the moderating influence of Operational strategy.

This research has contributed to the existing knowledge about the service. The motivation of workers is the main factor that determines the execution of projects in the construction industry. Furthermore, recent studies have contributed fresh findings to the current body of knowledge on project performance in building projects. The results of the current investigation lead to the discovery of several practical implications.

The present study is beneficial for professionals, particularly those involved in construction projects. The current study indicates that there is a positive correlation between the motivation of the worker and the execution of the project. Construction projects must enhance their services. Managers enhance their motivational training to ensure that project performance is more efficient through increased motivation. Furthermore, enhancing the operational approach to optimize performance.

### **Limitation and Future Research Directions.**

The study outlines improving construction project performance in Bahawalpur, Multan, Lahore, and Faisalabad. This study examined project performance with three variables (One IV, One Moderator and one DV). Pakistani projects were studied at Bahawalpur, Multan, Lahore, and Faisalabad. Our study solely covers all major cities mentioned above. This research covers Bahawalpur, Multan, Lahore, and Faisalabad, with 210 respondents due to time and budget constraints. Due to time limitations, only one independent variable (IV), dependent variable (DV), and moderator were examined in this study. However, future research could enhance the model by exploring additional IVs, DVs, moderators, and mediators that could be utilized. The researcher can employ temporal lag due to the cross-sectional nature of the data. Furthermore, the research can potentially improve the data collection and get data from multiple countries. Ultimately, the data was exclusively collected from a limited urban area in Pakistan. Ultimately, we recognize that our main focus was on the administrative staff. Researchers should investigate the impact of project outcomes on non-managerial staff in the future.

### **Conclusion:**

The relationship between workers' motivation and project performance in Punjab (Pakistan) building projects in the top main cities has not been studied before. All cities listed are nearing completion of construction projects. Project performance criteria are the focus of this study. The results of 210 relevant responses suggest that project worker motivation improves performance directly and indirectly. The empirical study demonstrates that moderator operating strategy is crucial to these factors. Worker motivation and operational strategy are important in building projects. Other industries explain performance with this methodology. The current study's findings help managers, policymakers, practitioners, and government improve construction performance. Additionally, experts from various industries globally followed this investigation.

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