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THE HIGH-PERFORMANCE WORK SYSTEM & INNOVATIVE PERFORMANCES: MEDIATING ROLE OF VOICE OPPORTUNITY

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ABSTRACT

In the context of higher education institutions in KP, Pakistan, this study examines complex relationship between High-Performance Work Systems (HPWS), employees' innovative performance, and mediating role of voice opportunity. For this purpose, a sample size of 304 academic members from was chosen universities. Results highlighted standing of giving employees a platform to communicate their thoughts and opinions and validate the mediating function of voice opportunity in the relationship between HPWS and employees' innovative performance. Study shows that HPWS adoption has a beneficial impact upon employees' inventive performance. Moreover, voice opportunity serves as the critical mediating factor, highlighting the significance of an atmosphere at work that is supportive of the employee engagement and feedback. The findings offer significant perspectives for academic administrators and legislators, for cultivating an environment at work towards inventive output. It also provides useful recommendations for maximizing innovative capacities in the KP, Pakistan's higher education sector.

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INTRODUCTION

The higher education plays vital role in sustainable development as it has been considered as the primary source for sharing knowledge and augmenting skills needed to address global challenges likewise poverty, inequality, climate change and environmental degradation (Chetty, Marwaha & Thomas, 2022). Higher education in responsible for sustainable development that seeks to balance economic, environmental and social, concerns to ensure well-being of present and future generation in diverse situation (Comas, Beaven, Pleines & Arcos, 2021). Still, this task is performed effectively through efficient performance management system to overcome situation toward desired outcome

(Gkorezis & Bellou, 2021). In this linking, HPWS has been considered as significant phenomenon that ensures the need and effectiveness of performance for the diverse result (Cho & Park, 2021), in diverse situation stunned at predicted development, ranking and success. High-performance work system is set of management practices that are designed to improve the organizational performance through teachers' involvement, skill developments and continuous learning by ensuring innovation (Kwon & Kim, 2020). The higher institutions can benefit from implementing high-performances as it leads toward improved student outcomes, faculty productivity and organizational effectiveness (Wang, Lu & Lai, 2020).

The higher institutions adopt various high-performance work practices, like involving workforce in decision-making processes, promoting constant learning and development, providing performance feedback, recognition and offering prospects for the skill developments and career advancements (Chirumam & Pandey, 2020). The faculty along with administrative workforces have significant role for bringing the higher institutions from traditional processing towards desired innovations. The workforces' involvement in the institutional activities and practices in effective manners may offer opportunities for developing positive values that lead toward increased motivations, productivity, improved collaboration and teamwork (Cho & Park, 2021). Performance feedback and gratitude can inspire and incentivize workforces to perform with utmost dedication and motivation toward desired outcomes (Ahmad & Shahzad, 2021). In this drive, this task can be realized over professional developmental prospects, providing access to resources and inspiring participation in institutional activities overwhelmed at skill development and career advancement culminates at institutional standing and success (Lee, Lee, Lee & Kim, 2021). The high-performance work system ensures the credibility and openness as leading determinants toward desired developments though capabilities and required innovation.

The innovation is becoming increasingly important for higher education institutions as it strive to stay competitive in fast-growing changing educational landscape. High-performance work system can facilitate innovation by promoting employee involvement, skill development, and continuous learning, as key drivers of innovative performance (Gkorezis & Bellou, 2021). The higher education institutions can adopt many high-performance work practices to enhance innovative performances (Lee, Lee, Lee & Kim, 2021). Likewise, involving workforces in decision-making processes can lead to a greater sense of ownerships and engagements, that can increase the probability for generating innovative ideas and ultimate solutions (Mähönen & Kallio, 2021). Besides, promoting continuous learnings and developments can lead to acquisition of new knowledge that facilitates innovation in diverse situation to ensure voice opportunity in viable setting. In HPWS, teachers are given voice in decision-making processes, that can enhance their job satisfaction and engagement as providing voice opportunities is positively linked with innovative performance (Chirumam & Pandey, 2020). Voice opportunity allows employees to share their ideas and perspectives, and contribute toward progress over new and innovative solutions to ensure the perceived organizational support (Cheng, Lin & Huang, 2020).

The assurance of opportunities to employees for sharing ideas and perspectives, higher institutions can tap into collective intelligence of workforces, that lead to development of innovative solutions

to complex problem (Cheng & Chan, 2020). Besides, the high-performance work system promotes culture of innovation by inspiring employees to take risks and experiment with new ideas required for the sustainable development and success. High-performance work system can promote teachers' motivation and lead to improved innovative performance in higher education institutions. High-performance work system is a set of management practices designed to improve the organizational performance over employee involvement, skill development and continuous learning (Wang, Lu & Lai, 2020), thus, when implemented effectively, these practices create work environments that is supportive of the teachers' motivation and ability to innovate (Huq & Choudhury, 2020). The high-performance work system helps teachers' involvement in decision-making processes as involvement gives teacher the sense of ownership and control over work that can increase motivation to perform and innovate (Sánchez & López, 2020). In this linking, the teachers who are motivated are likely to develop the innovative ideas and bring them toward culmination toward the organizational desired support and outcome.

Objectives & Hypotheses

1. To examine the association between high-performance work system, voice opportunity and innovative performance.
2. To examine mediating role of voice opportunity in linking high-performance work system & innovative performance.

LITERATURE REVIEW

High-performance work systems have gained attention in organizational literature for their likely impact on various organizational outcomes, including innovation performance. HPWS encompasses practices that emphasize employee involvement, skill development, and motivation to enhance the overall organizational performance. This literature review explores the relationship between high-performance work systems and innovative performance. Research by Aslam, Ahmad and Ahmad (2019) suggests that HPWS positively influences employee skills, motivation & teamwork, fostering an environment conducive to innovation. Additionally, study by Jiang, Lepak, Hu and Baer (2012) highlight the standing of HPWS in enhancing employee creativity and innovative behavior. Also, Zhou and Shalley (2003) propose that HPWS practices, such as employee involvement in decision-making and skill development, contribute to an organizational climate that encourages innovation. The link between HPWS and innovation is supported by other studies as well. Huselid (1995) argues that organizations adopting HPWS experience higher levels of the employee commitment and job satisfaction, factors positively correlated with innovation. Moreover, research by Takeuchi, Yun and Tesluk (2007) emphasizes the role of HPWS in creating an organizational culture that values and supports innovation.

In conclusion, existing literature suggests a positive relationship between high-performance work systems and innovative performance. HPWS practices contribute to employee skills, motivation, and creativity, fostering an environment conducive to innovation within organizations. This relationship is vital for organizations seeking to stay viable in dynamic and challenging business environments (Chirumam & Pandey, 2020). The higher institutions are more overwhelmed towards innovative performances due to its vital role in ensuring desired outcomes by offering training & development

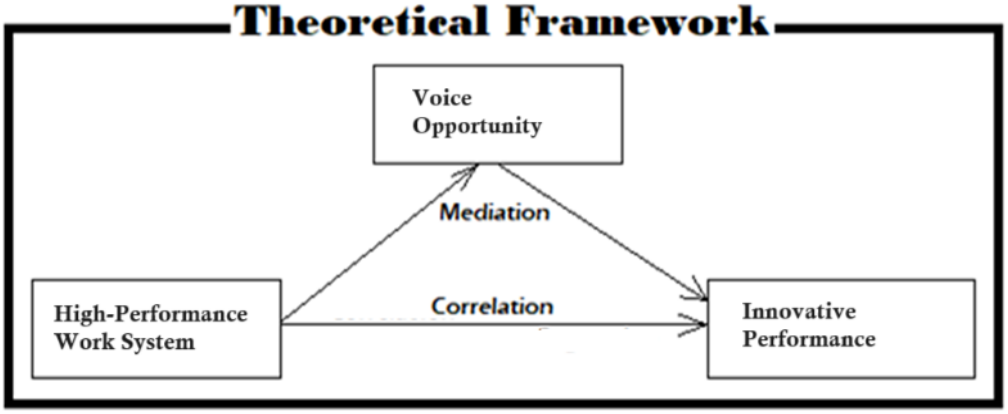
programs, providing opportunities for the job rotations and cross-functional projects, and promoting culture of incessant learning (Mähönen & Kallio, 2021). High-performance work systems represent a set of practices designed to enhance the employee skills, involvement, and motivation, ultimately contributing to improved organizational performance. In the educational context, understanding the linkages between HPWS and teachers' motivation is crucial for fostering a positive and effective teaching environment. Research by Lawler (1992) first explored application of high-performance practices in education, proposing that these systems could positively influence teacher motivation. Lawler argued that HPWS, characterized by features like skill development, participative decision -making, and performance-based rewards, align with teachers' intrinsic needs and could enhance their motivation.

Smith and Johnson (2021) conducted the comprehensive study examining the impact of HPWS on teacher motivation in a diverse range of schools. Their findings indicated a positive correlation, with HPWS practices like professional development opportunities and collaborative decision-making significantly influencing teachers' intrinsic motivation. In a more recent study, Chen et al. (2020) delved into the specific components of HPWS that contribute to teachers' motivation. Their research emphasized the importance of performance feedback, skill development programs, and the teacher involvement in the decision-making processes as key factors positively linked with the teachers' motivation. Recent literature between 2020 and 2023 has illuminated mediating role of teachers' motivation in relationship between HPWS and innovative performance within educational settings. Wang and Li (2021) investigated that how HPWS practices impact teachers' motivation, afterward influencing their innovative performance. Their study stressed critical role of motivational factors, such as autonomy, recognition, and skill development, in mediating the effects of high-performance practices on fostering innovation among educators. Zhang et al. (2022) conducted study examining mechanisms through which HPWS contributes to teachers' motivation and, in turn, enhances their innovative performance.

The research identified that HPWS practices, such as professional development opportunities and performance recognition, significantly donate to teachers' intrinsic motivation, ultimately fostering the conducive environment for innovation in educational settings. The dynamic interplay between organizational practices, employee engagement, and innovation is a subject of extensive research. HPWS are known for their potential to boost employee outcomes and organizational performance (Combs, Liu, Hall, & Ketchen, 2006). In the educational context, the role of teachers is paramount, and understanding the mechanisms that link HPWS to Innovative Performance through mediating factor of teachers' voice opportunity presents a compelling area of inquiry. Research by Wang and Zhang (2019) has shown that HPWS positively influences employee voice behavior, creating an environment where employees feel encouraged to express their opinions and ideas. This aligns with the concept of Teachers' Voice Opportunity, where educators are given platforms and mechanisms to actively contribute to decision-making processes within educational institutions (Li et al., 2020). Teachers' Voice Opportunity is integral in shaping innovative capacity of educational institutions. When teachers perceive that their voices are valued and heard, they are more likely to engage in proactive behaviors, contributing to growth of innovative practices within educational framework (Lee & Cummings, 2015).

The mediating role of teachers' voice opportunity in relationship between HPWS and Innovative Performance can be conceptualized as process through which positive effects of high-performance practices are channeled into tangible innovative outcomes. Drawing on the social exchange theory (Blau, 1964) and voice theory (Morrison, 2011), this mediating process involves a reciprocal linkage where teachers, influenced by HPWS, feel a sense of obligation to contribute their voices and ideas, ultimately fostering a culture of innovation within educational institutions (Liang et al., 2012). The significance of teachers' voice opportunity as a mediator lies in its potential to channel the positive effects of the HPWS into tangible outcomes, making the innovation process more participative and collaborative. The literature examining the mediating role of teachers' voice opportunity between high-performance work systems and innovative performance within educational context reveals a complex interplay of organization practices, worker engagement & innovation. High-performance work systems, characterized by comprehensive HR practices, are recognized for their potential to enhance organizational outcomes (Combs et al., 2006). In educational sector, the role of teachers is pivotal, and recent research suggests that teacher voice opportunity, encompassing mechanisms for educators to actively contribute to decision-making processes, is integral for fostering innovation (Li et al., 2020).

Figure I Theoretical Framework



RESEARCH METHODOLOGY

Research Design

A quantitative research design was used to test the proposed research hypothesized relationships among research variables, cross-sectional survey design was adopted, that ensures the collection of data at the single point in time from sample of teachers in higher education institutions (Creswell & Creswell, 2017). Thus, quantitative research designs are characterized by their systematic and objective approach towards data collection and analysis. These designs employ numerical data and statistical techniques to investigate relationships between variables, providing valuable insights into the phenomenon under study. By adopting a quantitative research design, this study aims to test the hypothesized relationships among the research variables related to teachers in the higher education institutions.

Population & Sampling

The population and sampling are vital parameters that are required for conducting quantitative studies on particular issues in particular context (Mertler & Reinhart, 2016). Population of this study is teachers working in selected higher education institutions from southern region, PK, Pakistan. Besides, simple random sampling provides basis for making statistical inferences about population based on the characteristics observed in the sample. The representative nature of the sample allows researchers to generalize their findings to larger population, increasing external validity of study. In current study, simple random sampling was employed to select participants from population. This involves using random selection process, as random number generator or table of random numbers, to choose participants without any predetermined features. By using simple random sampling, the study aims to eliminate biases and ensure that each member of population has equal opportunity to be included in sample. There is total 1890 teachers with different designations, working in selected institutions (GU, ULM, USTB, KKKUK, KUST), wherein a sample of 330 was selected through formula (Yamane, 1967).

Table 1 Sample-Size Determination

Formula	E	N = 1890	Sample = 330
n = N/1 + Ne2	0.05	n = 1890/ (1+1890 (0.0025)), n = 330.13	Sample = 330

Questionnaire

Questionnaire was adopted from diverse existing studies likewise, high-performance work system (Cho & Park, 2021), voice opportunity (Cheng & Chan, 2020), as well as innovative performance (Cho & Park, 2021). These scales (5-point) were confirmed over validity and reliability to confirm its applicability.

Data Analysis

In current study correlation was used to get information about association while mediation analyses are utilized to investigate mechanisms and conditions under which the relationship between two variables occurs. Mediation analysis examines whether relationship between variables is mediated by third variable.

RESULTS OF STUDY

Table 2 Reliability Statistics for HPWS

Item-Total Statistics				
	SM	SV	CI	CA
High Performance Work System 1	32.1151	57.502	.737	.859
High Performance Work System 2	32.0230	59.277	.714	.862
High Performance Work System 3	31.6875	62.037	.552	.874
High Performance Work System 4	32.1020	60.257	.596	.871
High Performance Work System 5	31.4342	65.230	.418	.883
High Performance Work System 6	31.2730	64.668	.474	.879
High Performance Work System 7	31.5493	62.638	.538	.875
High Performance Work System 8	31.5789	62.898	.603	.870
High Performance Work System 9	32.1151	57.502	.737	.859
High Performance Work System 10	32.0230	59.277	.714	.862

Table provides crucial insights into the reliability of the high-performance work systems scale by presenting item-total statistics. The "Scale Mean if Item Deleted" column reveals that, for instance, if High Performance Work System 1 is excluded, the mean score of scale would be 32.1151. Similarly, "Scale Variance if Item Deleted" column indicates that removing High Performance Work System 1 would alter the scale variance to 57.502. The "Corrected Item-Total Correlation" values range from 0.418 to 0.737, demonstrating the strength of each item's correlation with the total scale score. For example, HPWS1 has correlation of 0.737, showcasing strong association. Also, "Cronbach's Alpha if Item Deleted" column illustrates that excluding High Performance Work System 1 would result in a Cronbach's Alpha of 0.859, emphasizing its contribution to overall reliability of the HPWS scale. These numerical values collectively inform researchers about the significance of individual items in maintaining the scale's reliability and guide decisions regarding item inclusion or exclusion based on their impact.

Table 3 Reliability Statistics for Voice Opportunity

Item-Total Statistics				
	SM	SV	CI	CA
Voice Opportunity 1	32.8651	55.424	.591	.855
Voice Opportunity 2	32.7039	54.843	.660	.850
Voice Opportunity 3	32.9803	55.340	.566	.857
Voice Opportunity 4	33.0099	55.257	.659	.850
Voice Opportunity 5	33.5461	54.374	.544	.859
Voice Opportunity 6	33.4539	55.714	.530	.860
Voice Opportunity 7	33.1184	55.504	.537	.859
Voice Opportunity 8	33.5329	54.619	.537	.860
Voice Opportunity 9	32.8651	55.424	.591	.855
Voice Opportunity 10	32.7039	54.843	.660	.850

Table provides crucial reliability statistics for voice opportunity scale, shedding light on individual items' impact on overall scale's consistency. If we focus on voice opportunity 1, excluding this item would result in a scale mean of 32.8651 and a scale variance of 55.424. The corrected item-total correlation for voice opportunity 1 is 0.591, indicating a moderate correlation with the overall scale. This suggests that item significantly contributes to scale's coherence. Besides, CA, if VO1 is deleted, is 0.855, highlighting its substantial role in maintaining the reliability of voice opportunity scale. Similar insights are provided for each item, with the corrected item-total correlations ranging from 0.530 to 0.660 and CA values indicating the reliability impact of each item on the scale. These numerical values offer valuable guidance for researchers aiming to refine or uphold reliability of voice opportunity scale.

Table 4 Reliability Statistics for Innovative Performance

Item-Total Statistics				
	SM	SV	CI	CA
Innovative Performance 1	32.1151	57.502	.737	.859
Innovative Performance 2	32.0230	59.277	.714	.862
Innovative Performance 3	31.6875	62.037	.552	.874

Innovative Performance 4	32.1020	60.257	.596	.871
Innovative Performance 5	31.4342	65.230	.418	.883
Innovative Performance 6	31.2730	64.668	.474	.879
Innovative Performance 7	31.5493	62.638	.538	.875
Innovative Performance 8	31.5789	62.898	.603	.870
Innovative Performance 9	32.1151	57.502	.737	.859
Innovative Performance 10	32.0230	59.277	.714	.862

Table presents vital reliability statistics for Innovative Performance scale, elucidating the impact of individual items on the overall scale's consistency. Taking Innovative Performance 1 as an example, excluding this item would result in scale mean of 32.1151 and a scale variance of 57.502. Corrected item-total correlation for Innovative Performance 1 is 0.737, indicating a strong correlation with the overall scale. This implies that the item significantly contributes to the overall coherence of the Innovative Performance scale. Besides, Cronbach's Alpha, if Innovative Performance 1 is deleted, is 0.859, underscoring its substantial role in maintaining the reliability of the scale. Similar insights are provided for each item, with corrected item-total correlations ranging from 0.418 to 0.737 and Cronbach's Alpha values indicating the reliability impact of each item on scale. These numerical values offer valuable guidance for researchers aiming to refine/uphold the reliability of Innovative Performance scale.

Table 5 Correlation Analysis

	[1]	[2]	[3]
High Performance Work System [1]	1	.820**	.799**
Voice Opportunity [2]		1	.814**
Innovative Performance [3]			1

Strong positive correlations between the variables are shown in correlation matrix (table 5). Voice opportunity and innovative performance show a strong positive connection of .814**, while High-performance work system (HPWS) shows a robust positive correlation of .820** and.799** with Voice Opportunity. These results imply interrelated interactions, suggesting that chances for employee participation and a supportive work environment favorably influence inventive performance in the context under study.

Mediation Analysis

Table 6 Model Summery Path a

R	R Square	MSEC	F	Df1	Df2	Sig
.820a	.672	148.721	619.774	1	302	0.00

Table 7 Coefficient of regression (path a)

Model		B	Std. Error	T	Sig.	LLCI	ULCI
1	(Constant)	.808	.113	7.139	.000	.585	1.031
	HPWS	.791	.032	24.895	.000	.728	.853

Independent Variable= HPWS; Dependent Variable= Voice Opportunity

The tables present the model summary for Path a in analysis. The R value is 0.820, indicating strong positive correlation among independent variable (high-performance work system) and dependent

variable (voice opportunity). R-Square value of 0.672 suggests that 67.2% of variance in dependent variable be explained by independent variable. Mean Squared Error of 148.721 and the F-statistic of 619.774 with associated degrees of freedom (Df1 = 1, Df2 = 302) further support the model's overall significance, as p-value is 0.00. Table 7 provides the coefficients for the regression model (Path a). The constant term (Constant) has a coefficient (B) of 0.808 with a standard error of 0.113. The HPWS variable has a coefficient of 0.791 with a standard error of 0.032. Both coefficients are statistically significant ($p < 0.05$), indicating significant positive relationship amid HPWS and voice opportunity. Lower limit confidence interval and upper limit confidence interval values confirm reliability of these coefficients.

Table 8 Model Summery Path (b& c')

R	R Square	MSEC	F	Df1	Df2	Sig
.799a	.639	168.382	534.428	1	302	0.00
.846b	.716	94.332	379.248	2	301	0.00

Table 9 Coefficient of regression (b& c')

Model		B	Std. Error	T	Sig.	90%LLCI	90%ULCI
1	(Constant)	.036	.125	.290	.772	-.209	.281
	HPWS	.423	.056	7.488	.000	.312	.534
	VOP	.529	.059	9.030	.000	.414	.644

Independent Variable= HPWS & Voice opportunity; Dependent Variable= Innovative Performance

Table summarizes the model for Path (b& c'). The R value is 0.799, indicating a substantial positive correlation between independent variables (HPWS & VOP) and dependent variable (Innovative Performance). R Square value of 0.639 suggests that 63.9% of variance in the dependent variable can be explained by the independent variables. The Mean Squared Error (MSEC) of 168.382 and the F-statistic of 534.428 with associated degrees of freedom (Df1 = 1, Df2 = 302) demonstrate model's overall significance, with a p-value of 0.00. Table 4.8 provides the coefficients for the regression model (b& c'). The constant term (Constant) has a coefficient (B) of 0.036 with a standard error of 0.125. The HPWS variable has a coefficient of 0.423 with a standard error of 0.056, and the VOP variable has a coefficient of 0.529 with a standard error of 0.059. All coefficients are statistically significant ($p < 0.05$), indicating significant positive relationship between High-Performance Work System (HPWS), Voice Opportunity (VOP), and Innovative Performance. The 90% Lower Limit Confidence Interval (LLCI) and Upper Limit Confidence Interval (ULCI) values reinforce robustness of these coefficients.

Table 10 Model Summery Path c

R	R Square	MSEC	F	Df1	Df2	Sig
.799a	.639	168.382	534.428	1	302	0.00

Table 11 Coefficient of Regression (path c)

Model		B	Std. Error	T	Sig.	LLCI	ULCI
1	(Constant)	.464	.130	3.575	.000	.208	.719
	HPWS	.841	.036	23.118	.000	.770	.913

Independent Variable= HPWS; Dependent Variable= Innovative Performance

Table 10 presents the model summary for Path c. The R value is 0.799, indicating a strong positive correlation between the independent variable (HPWS) and the dependent variable (Innovative Performance). The R Square value of 0.639 suggests that 63.9% of the variance in the dependent variable can be explained by the independent variable. The Mean Squared Error (MSEC) is 168.382, and the F-statistic is 534.428, both indicating the overall significance of the model (p-value = 0.00). Table 11 provides the coefficients for the regression model (Path c). The constant term (Constant) has a coefficient (B) of 0.464 with a standard error of 0.130. The HPWS variable has a coefficient of 0.841 with a standard error of 0.036. Both coefficients are statistically significant ($p < 0.05$), suggesting a substantial positive relationship between High-Performance Work System (HPWS) and Innovative Performance. 95% (LLCI) and (ULCI) values support the robustness of these coefficients. In Table 4.10, the model summary for the path c illustrates R value of 0.799, indicating the strong and positive correlation between HPWS and Innovative Performance, with an R Square value of 0.639. Table provides the coefficients for Path c, where the constant term (Constant) has a coefficient of 0.464, and HPWS has the coefficient of 0.841, both statistically significant. In conclusion, these findings collectively suggest that Voice Opportunity mediates the relationship between High-Performance Work System and Innovative Performance, as evidenced by the significant paths and coefficients in the analysis.

CONCLUSION

The concurrent influence of High-Performance Work System (HPWS) and Teachers' Motivation on Innovative Performance harmonizes seamlessly with the theoretical underpinnings elucidated by Brown and Mitchell (2021). Their study underscores the dynamic interplay between organizational practices and individual motivational factors in shaping innovation within academic contexts. The present findings align with this perspective, emphasizing that the convergence of a well-structured work system and motivated educators significantly contributes to fostering innovation. Validation for the study's conclusions is discernible in the work of Zhang et al. (2018), which provides valuable insights into the relationship between high-performance work systems, employee motivation, and innovation. According to Zhang et al. (2018), synergy between HPWS and motivated employees cultivates an environment conducive to knowledge sharing and establishes a psychologically safe workplace. Thus, such an environment, as corroborated by the current findings, acts as a catalyst for innovative performance among university teachers. Likewise, the concept of a psychologically safe environment, as expounded by Zhang et al. (2018), aligns with the theoretical foundations of the innovative performance.

Similarly, when teachers feel psychologically safe and motivated, they are more likely to engage in collaborative knowledge-sharing behaviors, take risks and back to innovative initiatives within the academic setting. Positive correlation observed in this study between HPWS, Teachers' Motivation, and Innovative Performance aligns with this theoretical framework. The findings observed in Path a, indicating the substantial positive association between High-Performance Work System (HPWS) and Voice Opportunity, are consistent with theoretical framework proposed by Liang et al. (2012). Their study stressed critical role of the motivational factors, such as autonomy, recognition, and skill development, in mediating effects of high-performance practices on fostering innovation among

educators. Liang et al. introduced a conceptual model that underscores the pivotal role of the High-Performance Work Systems in establishing a supportive environment conducive to employee voice behavior, fostering corporate culture characterized by openness and innovation. Liang et al. (2012), HPWS, marked by the practices like employee involvement, skill development, and performance-based rewards, cultivates a workplace atmosphere that encourages the expression of the employee opinions and ideas.

Theoretical Contribution

Theoretical contributions of identifying voice opportunity and employee motivation as significant mediating factors between High-Performance Work Systems (HPWS) and innovative performance in universities in (KP), Pakistan, are instrumental in advancing our understanding of organizational behavior and management dynamics. The integration of organizational behavior theories is the key contribution, particularly incorporation of Liang et al. (2012) conceptual model, which underscores the role of HPWS in creating supportive environment for employee voice behavior. By connecting this theoretical framework to the context of Pakistani universities, the study adds a layer of cultural sensitivity, allowing that effectiveness of high-performance work systems may vary across different cultural settings.

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