



JOURNAL OF SOCIAL RESEARCH DEVELOPMENT

www.jsrd.org.pk
editor@jsrd.org.pk

IMPACT OF H-PERFORMANCE W-SYSTEM ON EMPLOYEES' PERFORMANCE: MEDIATING ROLE OF PSYCHOLOGICAL CONTRACT BREACH

Akbar Zaman¹, Shahid Nawaz² & Shaukat Ullah Khan³

¹PhD Scholar, Department of Public Administration, Gomal University, Dere Ismail Khan, Pakistan

²PhD Scholar, Department of Public Administration, Gomal University, Dere Ismail Khan, Pakistan

³PhD Scholar, Department of Public Administration, Gomal University, Dere Ismail Khan, Pakistan

KEYWORDS	ABSTRACT
H-Performance Work System, Employees' Performance, Psychological Contract Breach, HEIs	The high-performance work system is leading phenomenon that acts as the compact package comprising different human resource practices that are used widely as group of different practices and as a compact phenomenon thereby amalgamating the entire practices in single package known as high-performance work-system. The HPWS is important and effective for all the organizations in modern viable situations. This system allows organizations including HEIs to get desired performance over a compact system to attain the desired short-term tasks and long-term objectives. This system helps in defining parameters that are dynamic in attaining desired performance of employees and institutions. The employees' performance is most effective phenomenon leading to employees' actual potential and the efforts towards the task achievement. The existing literature offered different factors and issues that can disturb linkages among HPWS and employees' performance. This study offered significant results by using psychological contract breach as mediator.
Corresponding Author	Akbar Zaman, Email: akbarmaseed@yahoo.com
DOI	https://doi.org/10.53664/JSRD/02-01-2021-01-1-15

INTRODUCTION

The higher education institutions around the globe are considered as most dynamic sphere in expanding knowledge, creating knowledge-based societies and producing competent and knowledgeable workforces to different sector of economies. In this regard, the role of higher education institutions (HEIs) becomes vital in determining the success parameters of different sectors thereby offering the capable and committed workforces. The HEIs are responsible in promoting the dynamism and to encourage the socio-academic and socio-economic positions of concerned countries. In this connection, there exists wide-ranging dynamic issues that are responsible in effecting and facilitating the critical role of HEIs in achieving the milestone in national development. Consequently, the role of HEIs becomes vital in providing the effective teaching and learning environment to the student to make

them knowledgeable workforces to facilitating the different organizations in attaining the strategic objectives.

The “high-performance work system” has been gradually established as the active system for managing the performance of organizations. It has been widely researched in context of higher education and recommended as effective system for performance management in the institutions (Demirbag et al., 2014). The higher-performance work system is inclusive package of different human resources’ practices that ensures effective “human resource management practices” in institutions (Oladapo & Onyeaso, 2013). It is amalgamation of different dynamic practices that comprises recruitment and selection, extensive training, incentive compensation, information-sharing, employees’ involvement and performance evaluation aligned that need to be aligned with institutional long-term objectives (Wallner & Menrad, 2012). HPWS theme is to improve institutional and employees’ performance together with developing the attitude, competence, loyalty motivation and commitment of employees.

Through psychological interpretation process, the employees understand the perquisite and inclusive information about these practices that how these practices under umbrella of HPWS is helpful for employees and institutions towards actual realization of anticipated objectives (Kristian & Braekkan, 2012). The HPWS fundamentally helpful in nurturing the employees’ attitude and behavior with aim to align with institutional objective that how the concerned employees will be able to perform their responsibilities and how they may be able to achieve their assigned tasks (Nicole & Nouman, 2013). Thus, the main theme of the HPWS is to improve the performance of the employees at workplace and to motivate them to attain their assigned tasks in effective manner leading to the institutional success (Akhtar, Nawaz & Shahid, 2016). The HPWS ensures the high involvement managing, high commitment management, work practices, people management and high-performance management practices.

Problem Statement

The “high-performance work system” is vital for the organizations in prioritizing their work values and standards leading to higher performance that is required to achieve strategic values and desired objectives. The HPWS is widely researched in the higher educational context thereby recommending its reliability for higher institutions. Therefore, this study aimed at probing relationships between employees’ performance and high-performance work system in higher educational background. The study further aimed at examining mediating role of the psychological contract breach as mediator in connecting the “high-performance work system” and employees’ performance in higher educational institution background with the aim to produce the new insights about existing issues to contribute the existing database.

LITERATURE REVIEW

The high-performance work system not only promote workforce performance and ultimate resilience but also encourage the psychological contract. However, when the expectations of employees are not accepted, and even fail to materialize, then concerned employees are expected to experience adversative psychological reaction (James & Avolio & Luthans, 2009). Similarly, the employees with high resilience respond to adversative situations by recognizing and acknowledging influence, resources and time, mandatory to track back to symmetrical relationships in among employees and institutions (Nadeem, Riaz & Danish, 2019). The HPWS and employees' resilience have been researched with results that both have weighty impact on the employees' performance while psychological contract breach is researched to have negative relationship with employees' performance. Keeping in view the prevailing trends, this study aimed to examine above-mentioned relationship in higher educational context.

High-Performance Work System

The high-performance work system has been measured as complete package of different effective human resource practices like the selection, training, compensation, engagement, empowerment and performance appraisal that aims at improving the performances of the employees leading to institutional success (Cooke, Cooper, Bartram, Wang & Mei, 2016). This system has been widely researched and thus recommended as significant structure for organizations in managing their core values related with different practices. The system mainly emphasis on improving productivity, reducing costs, creating values for workforces and developing strategic plans for concerned organization (Cooper, Liu & Tarba, 2014). The HPWS is effective for managing the performance of the employees and institution as this system offers different practices for effective and efficient implementation of strategic aims and objectives of the organization (Nadeem, Riaz & Danish, 2019). This system is also recommended by researchers for the educational institutions for managing their affairs more effectively.

Employees' Performance

The high-performance work system is indispensable for almost all the organizations but its role is more important for academic institutions especially higher education institutions since these institutions are performing the most important role in shaping the attitude of the students and preparing them for their professional lives (Cooper, Liu & Tarba, 2014). This system is concerned with development of employees and institutional performance as without the effective and efficient performances, institutions may not attain their desired long-term objectives (Jawad, Malik, Pracha & Malik, 2017). In this state, some important influential factors are responsible in effecting the links between higher-performance work system and performance wherein the most investigated factors are psychological contract breach and employees' resilience (Nadeem, Riaz & Danish, 2019). which are explored in different contexts but missed in the higher educational context. Therefore, this study aims

at examining missing gap concerning these variables in educational context in developing countries particularly in Pakistan.

Psychological Contract Breach

The “psychological contract” is an agreement between organizations and employees that denotes certain expectation in exchange of some contribution and outcomes. The contract specifies the reciprocal and mutual interaction based upon some shared interests that both employees and the organizations try to preserve at their ends (Kristian, & Braekkan, 2012). However, any deviation whether desirable and undesirables leads towards breach in this psychological contract named as “psychological contract breach”. The psychological contract breach happens when desired expectations are not met due to certain reasons and when their one party in contract deviate from already agreed conditions (Jawad, Malik, Pracha & Malik, 2017). The psychological contract breach not only affects employees’ expectations but influence their performance and commitment undesirably (Zhao, Wayne, Glibkowski & Bravo, 2007). For the employees as well as for organization, in all respects, psychological contract breach is important keeping in view the demands and interests of the employees and organization.

RESEARCH METHODOLOGY

The procedures and methods for conducting the research studies in attaining particular objectives in particular context has been presented in the research methodology section. It further supports the researchers in offering the particular tools and techniques as required for conducting studies on particular issues based upon the nature of research. Therefore, this section offered the prerequisite methodology (tools and techniques) to conduct the study scientifically and to reach conclusion based upon the exploration of relationships among the research variables.

Research Philosophy

The “high-performance work system” and its relationship with the employees’ performance are existing realities supported by psychological contract breach and employee resilience, which are aimed to further investigate in higher educational context, by applying statistical trials to offer new methodologies, new results and new information (Hughes & Sharrock, 1997). All these are prerequisites of positivist philosophical approach, therefore, positivism was the research philosophy applicable in this research study.

Research Approach

In social research, different approached have suggested by scholars in order to access the population and sample of the study prerequisite for conducting research studies. In this regard, each approach has its advantages and disadvantages and best approach is most befitting based upon the nature of research study (Zikmund, Babin, Carr & Griffin, 2010).

The survey approach is used as survey likes excessive popularity in social research among the different methods for the data collection.

Population of Study

It is the group of individuals wherein the researchers are interested to access them and to collect their views about certain leading and burning issues. The population of research studies comprises different individuals from different contexts based upon the nature of the study (Saunders, 2011). The population has greater importance in the social research studies as without specifying proper population for the studies, the researchers might not be able to collect the data and analyze it to get the desired objectives (Zikmund, et al., 2010).

Sample & Sampling Technique

To collect the data from the entire population is not possible for researchers to conduct the study systematically therefore, the sampling is the best option to access population of the study. The sampling determines the characteristics of the entire population and thus helps in generalizing results towards entire population (Saunders, 2011). In social research, different sampling techniques are available that helps the researchers in facilitating to conduct research studies (Sekaran & Bougie, 2013).

Sample Determination

The sample has been drawn from the population of the study wherein the population of the study comprised the faculty members from the universities in southern region of KP. The southern region comprises the different districts wherein different universities are practical and population of universities includes (KUST=228 (www.kust.edu.pk), KKKUK=118 (www.kkkuk.edu.pk), USTB=180 (www.ustb.edu.pk), ULM=66 (www.ulm.edu.pk), GU=310 (www.gu.edu.pk)). Consequently, the total population of the universities in southern region comprises (228+118+180+66+310=902).

Table 1 Formula (Sample-Size)

E	N	Sample Size
0.05	902	277
Formula used	$n = 902 / (1+902 (0.0025))$	Distribute: 277
$n = N/1 + Ne^2$	$n = 277.112$	Re-collected: 260

(Yamani, 1967)

Data Collection & Analysis

Another important phase in research process is the data collection wherein two important sources have been recommended by social researchers comprises secondary and primary data collection (Sekaran, 1999:61). The secondary data was collected from the diverse online available and accessible sources in the form of different research articles on high-

performance work system, the employees’ resilience and performance and psychological contract breach. The data analysis is also “important part of the social research” process as without analysis of data, researcher cannot achieve desired objectives. The data analysis needs the proper understanding from the researchers in order to examine the data and to extract the desired outcomes (Kothari, 1986).

Questionnaire Design

In social research, based upon requirements of survey approach, questionnaire method is appropriate to collect the views/opinion from the respondents (Presser & Kroshnick, 2010). The “questionnaire was adapted from previous research studies” like high-performance work system (Veldhoven & Meijman, 1994), employee performance (Linda, Buuren & Beek, 2012) and psychological contract breach (Nicole & Nouman, 2013). These questionnaires have been used in different context with different outcomes variables. The questionnaire measurement is an important part of the research process which aims to provide better understand as well as insight in measuring the research variables of the current study. The research variables were measured through 5-point Likert scale “questions ranging from strongly disagree to strongly” agree.

Table 2 The Likert Scale (5-point)

Strongly Disagree	Dis-Agree	Neutral	Agree	Strongly Agree
1	2	3	4	5

DATA ANALYSIS

The results of the current study obtained through different statistical procedures related with the examination of relationships among the research variables under consideration. These relationships were assumed through different hypotheses/ assumptions that were extracted from the theoretical framework of the study. Similarly, in discussion section, the results of current study have been discussed by matching them with the results of the previous studies keeping in view commonalities and differences that exists in the current as well as existing research studies to make clear position of present study and to reach the conclusion systematically.

Table 3 Normality Distribution

	Kurtosis		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
High Performance Work System	-.485	.346	-.485	.346
Psychological Contract Breach	-.568	.264	-.568	.264
Employees’ Resilience	-.374	.198	-.374	.198
Employees’ Performance	-.519	.311	-.519	.311

Table 4 Collinearity Analysis

Model	Collinearity		Durbin-Watson
	Tolerance	VIF	
Variables (Constant)			1.252
High Performance Work System	.611	1.546	
Psychological Contract Breach	.543	1.619	
Employees' Resilience	.642	1.518	
Employees' Performance	.724	1.672	

H₁: There is significant association between predictor, mediator and criterion variables

Table 5 Correlation Analysis

		HPWS	PCB	ERS
Psychological Contract Breach (PCB)	Pearson Correlation	-.511**		
	Sig. (2-tailed)	.000		
	N	260		
Employees Resilience (ERS)	Pearson Correlation	.698**	-.430**	
	Sig. (2-tailed)	.000	.000	
	N	260	260	260
Employees Performance	Pearson Correlation	.726**	-.552**	.681**
	Sig. (2-tailed)	.000	.000	.000
	N	260	260	260

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

The correlation provides association with regard to the strength and direction in relationship among the research variables. The first hypothesis of present study was about the association among the research variables under considerations. The results show that research variables are significantly associated likewise, the high-performance work system and the employees' performance (.726 & .000) (positive and significant association), employees' performance and psychological contract breach (-.552 & .000) (significant & negative association), the employees' performance and the employees' resilience (.681 & .000) (positive & significant association), the high-performance work system and psychological contract breach (-.511 & .000) and high-performance work system and employees' resilience (.698 & .000). Thus, from correlation results, the first hypothesis (H1) about association among research variables is thereby accepted.

H₂: The predicting variables have significant and positive impact on the criterion variable

Table 6 Model Summary

Model	R	R Square	Adjusted R2	Std. Error of Estimate
1	.643a	.610	.606	.37524

Table 7 ANOVA of Regression

Model	Sum Squares	df	Mean Square	F	Sig.
1 Regression	88.196	3	29.399	208.788	.000b
Residual	36.046	256	.141		
Total	124.242	259			

Table 8 Coefficients of Regression

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	
	B	SE	Beta		
1 (Constant)	.696	.151		4.623	.000
High Performance Work System	.329	.070	.341	4.686	.000
Psychological Contract Breach	-.419	.060	-.471	6.976	.000
Employees Resilience	.118	.055	.091	2.131	.034

Predictors: (Constant): HPWS, Psychological Contract Breach

Dependent Variable: Employees Performance

The second hypothesis was about cause-&-effect relationship wherein the results show that 61% variance in the outcome variable (employees’ performance) is due to predictors (high-performance work system, employees’ resilience and psychological contract breach). The coefficient of regression showed that all the predictors have significant impact on the criterion variable in determining relationship wherein the high-performance work system show significant impact on employees’ performance (.329 & .000), psychological contract breach revealed significant impact on the employees’ performance (-.419 & .000) and also employees’ resilience show significance (.118 & .000). Consequently, regression analysis provides significant information in determining the cause-&-effect relationship and therefore, hypothesis (H₂) about cause-&-effect is therefore accepted and substantiated based upon the outcomes from regression analysis.

H₃: Psychological Contract Breach significantly mediates Connection among High-Performance Work System and Employees’ Performance.

Mediation First Step (a)

Table 9 Model Summary

R	R Square	MSE	F	df1	df2	p
8670	.7516	.1516	780.7568	1.0000	258.0000	.0000

Table 10 Coefficients of Regression

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	.0614	.1155	.5317	.5954	-.1660	.2888
HPWS	.6400	.0336	27.9420	.0000	.8738	1.0063

Predicting Variable: High-Performance Work System

Criterion Variable: Psychological Contract Breach

Mediation Second & Third Steps (b & c)

Table 11 Model Summary

R	R Square	MSE	F	df1	df2	p
.8395	.7047	.1427	306.6883	2.0000	257.0000	.0000

Table 12 Coefficients of Regression

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	.9118	.1121	8.1305	.0000	.6910	1.1327
HPWS	.3846	.0655	5.8715	.0000	.2556	.5137
PCB	-.4169	.0604	6.9006	.0000	.2980	.5359

Predicting Variable: High-Performance Work System, Psychological Contract Breach

Criterion Variable: Employees' Performance

Mediation Fourth Step (c)

Table 13 Model Summary

R	R Square	MSE	F	df1	df2	p
.8062	.6500	.1685	479.1763	1.0000	258.0000	.0000

Table 14 Coefficients of Regression

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	.9374	.1218	7.6968	.0000	.6976	1.1773
HPWS	.7766	.0355	21.8901	.0000	.7067	.8464

Predicting Variable: High-Performance Work System

Criterion Variable: Employees' Performance

Table 15 Normal Theory Test (Sobel Test)

Effect	se	Z	p
.3846	.0655	5.8715	.0000

The mediation first model comprises predicting variable (high-performance work system), the mediating variable (psychological contract breach) and outcome variable (employees' performance). The first step of the mediation shows that 75% variance in the psychological contract breach is due to high-performance work system with the significant impact (.6400 & .000). The second step of mediation provides information about the indirect relationship wherein the high-performance work system and psychological contract breach perform their role as predictors in determining the employees' performance. The results show that there is 70% variance in employees' performance is due to psychological contract breach and high-performance work system with the significant impact (.3846 & .000 and -.4169 & .000) respectively. The fourth mediation step is more critical that provides the information about the direct relationship between research variables that has been also confirmed by the Sobel test for mediation confirmation.

The mediation fourth step offered the information about direct relationship between the predicting variable (high-performance work system) and dependent variable (employees' performance) wherein 65% change is evident in the outcome variable due to the predicting variable with significant impact (.7766 & .000). The mediation process provides significant information in deciding the mediation. All the paths in mediation remained significant and now the decision should be made on the basis of coefficient values. It is evident that values of coefficient (.7766) in the direct relationship have been reduced to (.3846) after inclusion of psychological contract breach in connecting high-performance work system and employees' performance. The decrease in coefficient value from (.7766 to .3846) revealed that mediator partially mediated the connection between the predicting and criterion variables therefore, the hypothesis (H3) about first mediation model is thus accepted.

DISCUSSION

The discussion is an important section of the research studies that confirmed the results in the light of existing studies results conducted in similar as well as diverse contexts in order to examine the commonalities and differences that exist in the present as well as previous research studies. The discussion helps in making clear the position of the current study that where it stands in context of the existing database of research. The determination of discussion is to describe and interpret the significances of current study results in light of "what was already known" around research issues/problem being explored and to clarify any new insights or understanding that appeared as outcome of current study problem. Thus, this study provides strong support through existing research studies to make clear the current study position in existing database of knowledge to reach the conclusion. In this connection, the present study provides the significant backing and support to validate the results and to reach the conclusion more comprehensively.

The study aimed to examine the relationships among research variables through certain assumptions, guidelines, hypotheses in the form of tentative solution to explore research variables (high-performance work system, employees' performance, psychological contract breach and employees' resilience) that were extracted from the theoretical framework of the current study. These relationships have already been examined in different studies with diverse outcomes (Zhao, Wayne, Glibkowski & Bravo, 2007; Wu & Chaturvedi, 2009; Kristian & Braekkan, 2012; Bardeel, Pettit, Cieri & McMillan, 2014; Mahmood, Khurshid, Bashir & Muhammad, 2016; Nadeem, Riaz & Danish, 2019). Still, this study investigates this relationship in higher educational context. Based upon results, emerged from statistical procedures about research variables relationships based on hypotheses, below-mentioned results have been discussed to make clear the position of current study.

The results of the study confirmed significant association between employees' resilience and employees' performance (.681 & .000) which established the significant and positive association between variables under considerations. These results have been supported and validated through the results of the existing research studies conducted in similar as well as diverse contexts (Harley, Allen & Sargent, 2007; Bal & Kooij, 2011; Shin, Taylor & Seo, 2012; Riaz & Mahmood, 2017; Caniëls & Baaten, 2019). Similarly, results provide valuable information about the association between psychological contract breach and employees' performance (-.552 & .000) however, association remained negative which has already been explored in different research studies with different research outcomes. The results have been validated through results (Zhao, Wayne, Glibkowski & Bravo, 2007; Matthijs, Chiaburu & Jansen, 2010; Liu, Huang, Huang & Chen, 2013; Franklin & Debono, 2019) from the previous research studies.

CONCLUSION

The present study provides significant information in summarizing the study and reaching the conclusion. In research, summary is used to announce the conclusion systematically to present all the facts mentioned previously. The present study attained the answers of the research questions that were assumed through the hypothesized form related with the relationships among research variables under consideration. The hypotheses were mainly related with association, cause-&-effect, mediation and group mean differences wherein the results of the study provide sufficient evidence in deciding the nature of relationships and reaching the conclusion. This section provides the brief summary of the results in that may help in reaching the conclusion. In this connection, results of hypotheses have been summarized in precise form to understand objectives of study and ultimate achievement of the current study. The summary of study also helps in offering the conclusion of the study more systematically and comprehensively.

1. H₁: The first hypothesis was about the association among the research variables like high-performance work system, employees' performance, psychological contract

breach and employees' resilience. The results of the study confirmed significant and positive association amid high-performance work system and employee performance while negative relationships were found between psychological contract breach, and employees' performance. Thus, due to significance association, the H_1 is hence accepted and substantiated.

2. H_2 : The second hypothesis was about the impact of predicting variables on criterion variable of study. The results confirmed the significant influence of the predictors on the criterion variables wherein high-performance work system and psychological contract breach have highly significant influence of the employees' performance as compared to the employees' resilience. Therefore, from the results, the decision and supportive judgment is to accept the H_2 of the study.
3. H_3 : The first mediation model was about to examine mediating role of psychological contract breach in connecting the high-performance work system and employees' performance wherein the results of the study confirmed that psychological contract breach partially mediated the relationship between employees' performance and high-performance work system. From these results, decision about H_3 is accepted and substantiated.

Contribution of Study

1. The contribution of this study is the careful deletion of research variables thereby surveying existing literature to explore these variables in research context under considerations to produce the significant information about the research variables and their contributions in the context under considerations.
2. The foremost contribution of this study is theoretical framework which has been extracted from the existing research in order to identify the gap in literature as well as to produce new knowledge about existing research variables along with their interrelationships in native environment.
3. The collection of primary data (first-hand data) is primary contribution of this study which provides new views of new respondents about existing research variables in the context under study. The analysis of these primary views thereby producing new empirical outcomes is also the contribution of this study.

Recommendations

1. The institutions are required to provide better understanding to their employees toward vitality of the high-performance work system, employees' performance and psychological contract breach through different seminars and other programs to develop their awareness towards these issues.
2. The employees' and institutions are required to provide respect to psychological contracts which in turn develop their behavior towards achievement of prolonged institutional objectives. The employees in turn will show their resilience and better performance to produce better outcomes and consequences.

3. The institutions are required to provide better opportunities to their employees for the professional development thereby offering them understanding towards the importance of these issues for the development of the institutions. The institutions will be more effective when utilizes these variables in the effective and efficient manners.

REFERENCES

- Akhtar, A., Nawaz, M., & Shahid, M. (2016). Impact of High-Performance Work Practices on Employees' Performance in Pakistan: Examining Mediating Role of Employee Engagement. *Pakistan Journal of Commerce and Social Sciences*, 10 (3), 708-724
- Bal, P. M., & Kooij, D. (2011). The relations between work centrality, psychological contracts, and job attitudes: The influence of age. *European Journal of Work and Organizational Psychology*, 20(4), 497-523.
- Bardoel, A. E., Pettit, T. M., Cieri, H. D., & McMillan, L. (2014). Employee resilience: An emerging challenge for HRM. *Asia Pacific Journal of Human Resources*. <https://doi.org/10.1111/1744-7941.12033>.
- Caniëls, M., & Baaten, S. (2019). How a learning-oriented organizational climate is linked to different proactive behaviors: the role of employee resilience. *Social Indicators Research*, 143 (2), 561-577.
- Cooke, L., Cooper, B., Bartram, T., & Mei, H. (2016). Mapping the relationships between high performance work systems, employee resilience and engagement: A study of banking industry in China. *International Journal of Human Resource Management*, 1-22.
- Cooper, L., Liu, Y., & Tarba, S. (2014). Resilience, HRM practices and impact on organizational performance and employee well-being. *The International Journal of Human Resource Management*, 25(17), 2466-2471.
- Demirbag, M., Collings, D., Tatoglu, E., Mellahi, K., & Wood, G. (2014). High-Performance Work Systems and Organizational Performance in Emerging Economies: Evidence from MNEs in Turkey. *Management International Review*, 54(3).
- Franklin, A., & Debono, M. (2019). The Relationship Between Psychological Contract Breach and Job-Related Attitudes. *SAGE Open*, 10.1177/2158244018822179, 1-10.
- Harley, B., Allen, B. C., & Sargent, L. D. (2007), "High performance work systems and employee experience of work in the service sector: The case of aged care. *British Journal of Industrial Relations*, 45 (3), 607-633.
- Hughes, J. A., & Sharrock, W. W. (1997). The philosophy of social research. Longman social research series (3rd Edition.). New York: Longman.
- James, A., & Avolio, B., & Luthans, F. (2009). Psychological Ownership: Theoretical Extensions, Measurement, and Relation to Work Outcomes. *Journal of Organizational Behavior*. 30. 173 - 191.

- Jawad, S., Malik, S., Pracha, T., & Malik, T. (2017). Effect of Psychological Contract Breach and Job Satisfaction on Work Engagement; A Case of Higher Education Institute of Pakistan. *Journal of Managerial Sciences*, XI (03), 279-296.
- Kothari, C. R. (1986). Quantitative Techniques. Vikas Publishing House, New Delhi. The essentials of the research.
- Kristian, F., & Braekkan, K. (2012). High Performance Work Systems and Psychological Contract Violations. *Journal of Managerial Issues*, 24 (3), 277-292.
- Linda, K., Buuren, S., & Beek, A (2012). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62 (1), 6-28.
- Liu, C. M., Huang, C. J., Huang, K. P., & Chen, K. J. (2013). Psychological contract breach, organizational trust and organizational citizenship behavior of hotel industry in Taiwan. *Pakistan Journal of Statistics*, 29, 635-648.
- Mahmood, A., Khurshid, K., Bashir, M., & Muhammad, Z. (2016). The impact of high-performance work system on employee attitude: the mediating role of human resource flexibility, *Science International, Lahore*, 28 (4), 61-70.
- Matthijs, P. B., Chiaburu, D. S., & Jansen, G. W. (2010). Psychological contract breach and work performance Is social exchange a buffer or an intensifier? *Journal of Managerial Psychology*, 25 (3), 252-273.
- Nadeem, K., Riaz, A., & Danish, Q. (2019). Influence of high-performance work system on employee service performance and OCB: the mediating role of resilience. *Journal of Global Entrepreneurship Research*, 9 (13), 1-13.
- Nicole, R., & Nouman, M. (2013). Measuring the Extent of a High-Performance Work System: A Mixed Methodology Approach. *Pakistan Journal of Commerce and Social Sciences*, 7 (3), 628-645.
- Oladapo, V., & Onyeano, G. (2013). An empirical investigation of sub dimensions of high-performance work systems that predict organizational innovation. *International Journal of Management & Marketing Research*, 6(1), 67-79.
- Presser, S., & Krosnick, J. (2010). Questionnaire design. Handbook of Survey Research. In: Oxford: Oxford University Press.
- Riaz, A., & Mahmood, Z. (2017). Cross-Level Relationship of Implemented High Performance Work System and Employee Service Outcomes: The Mediating Role of Affective Commitment. *Pakistan Journal of Commerce and Social Sciences*, 11 (1), 252-274
- Saunders, M. N. (2011). Research methods for business students (5th Edition). Pearson Education India.
- Sekaran, U. (1999). Research methods for business: A skill-building approach. 3rd ed. John. Hoe to conduct research.
- Sekaran, U., & Bougie, R. (2013). Research Methods for Business: A Skill-Building Approach (6th Ed.). John Wiley and Sons, Inc.

- Shin J, MS Taylor and M-G Seo (2012) Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors towards organizational change. *Academy of Management Journal* 55, 727-748.
- Veldhoven, M., & Meijman, T. (1994). Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA). Amsterdam: Nederlands Instituut voor Arbeidsomstandigheden.
- Wallner, T., & Menrad, M. (2012). High performance work systems as an enabling structure for self-organized learning processes. *International Journal of Advanced Corporate Learning*, 5(4), 32-37.
- Wu, P.-C. & S. Chaturvedi. (2009). "The role of procedural justice and power distance in the relationship between high performance work systems and employee attitudes: A multilevel perspective". *Journal of Management*, 35(5): 1228-1247.
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60, 647-680.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods* (8th Edition). Cengage Learning.