

Training and Development, Turnover Intention and Job Performance in the Services Sector of Pakistan

Janan

*Department of Management Sciences and Commerce, Bacha Khan University, Charsadda,
Pakistan*

janankhan752@gmail.com

Muhammad Yasir

Sunway Business School, Sunway University, Sunway City, Malaysia

yasirm@sunway.edu.my

Noreen Kanwal

Sunway Business School, Sunway University, Sunway City, Malaysia

noreenk@sunway.edu.my

Abstract

The purpose of this research is to examine the effect of Training and Development (T&D) on job performance, with turnover intention as a mediating factor, in public sector universities of Khyber-Pakhtunkhwa, Pakistan. This research aims to provide insights into how T&D influences faculty performance both directly and indirectly through turnover intention, contributing to a deeper understanding of employee retention and performance enhancement in the higher education sector. With the convenience sampling technique, data was collected and the sample size was 211. Correlation and regression analysis were used to examine the hypothesized model. The findings of this study show (a) a positive association between T&D and job performance, (b) a negative relationship between T&D and turnover intention, (c) a negative association between turnover intention and job performance, (d) turnover intention plays a mediating role between T&D and job performance. The current study shows that top management and policymakers of the public sector universities need to focus on providing continuous training and development programs, thereby, minimizing the levels of turnover intentions and, ultimately, enhancing the employees' job performance. Lastly, limitations and future research suggestions are provided.

Keywords: *T&D, Turnover Intention, and Job Performance.*

Introduction

The issue of turnover has a significant impact on every sector across the globe (Bersin, 2013) specifically in the education sector. Academic staff retention is a global issue impacting both developed and developing countries, not just Europe and other advanced

nations. In the context of Chinese higher education, 50.8 percent of the faculty members have considered changing careers, 54.9 percent of the faculty members have considered changing schools, and only 29.7 percent do not have any turnover intention (Zhang *et al.*, 2022). Literature also shows a higher level of turnover intention of the academic staff in the universities of Pakistan as well (Chughtai & Zafar, 2006; Maryam *et al.*, 2021).

The high turnover rate in Higher Education Institutions incurs significant costs and consequences, particularly when experienced and skilled academic staff leave or resign. This skillful Human Resource takes their teaching skills, research, and experience along with them (Chughtai & Zafar, 2006; Onah & Anikwe, 2016). Literature shows various reasons behind employee turnover through theoretical and empirical studies (Onah & Anikwe, 2016). For instance, training and development can be one of the reasons (Dias & Silva, 2016).

The nonexistence of training and development for the faculty members at Pakistani universities is another problem that negatively affects the faculty outcomes, like, realizing the university's goals, imparting appropriate knowledge, and insufficient participation of the students. All these factors have reduced the importance of education and augmented the turnover intention among the faculty of universities (Dogan & Aydin, 2012; Lawrence *et al.*, 2012). Research has indicated that workplace training and development affects workplace outcomes like work performance, motivation, and withdrawal behavior (Adhikari, 2023; Dysvik & Kuvaas, 2008). Despite these findings, most of the top management in Pakistan is still reluctant to effectively invest in training and development in HEIs where the turnover intention among the employees is still very high and job performance is low (Habib *et al.*, 2010).

Insufficient training and development opportunities may develop higher turnover intention (Kesen, 2016) and low job performance among employees (Kum *et al.*, 2014). One strategy used to reduce this attitudinal inclination and actual turnover could be investments in training and development. When employees have such opportunities, then they consider themselves to be important and the chances of turnover are decreased to a higher level (Dias & Silva, 2016). The provision of opportunities for training and development not only enhances their loyalty to their respective organizations but also increases employees' job performance (Adhikari, 2023; Elnaga & Imran, 2013). Thus, training and development enhance performance both at the individual and the organizational level (Al-Mzary *et al.*, 2015).

One of the major shortcomings faced by the Higher Education Sector of Pakistan is the lack of systematic, coordinated, and purpose-oriented training and development programs for the faculty in both public and private sector universities. This fact is also evident from the studies conducted by various researchers that there is an intense need for training and

development for university teachers in Pakistan (Ullah *et al.*, 2011). To realize the urgency of the situation the Higher Education Commission (HEC) has started some training programs like Faculty Professional Development Program, Professional Competency Enhancement Program for Teachers, and Ensuring Training Effectiveness.

Another issue before the higher education sector of Pakistan is the performance of the university teachers which falls short when it comes to the international standards. This fact is also supported by the study of Raza *et al.* (2010) which concluded that students of universities are not satisfied with the overall performance and specifically the role played by faculty members in the development of their social, personal, professional, and intellectual skills of students. Moreover, the performance of faculty members could be strengthened through training and development programs. T&D have a vital role in the improvement of the quality of academic staff which not only increases the standard of education but also improves the delivery of service to the students in universities (Aziz & Akhtar, 2014).

Proper training and development provide lasting effects on the overall performance of an organization. Similarly, it has also been proved that it minimizes life-threatening errors in a risky environment. For instance, Senders and Moray (1991) highlighted that between thirty percent and eighty percent of severe accidents in human-machines settings can surely be linked to human error; therefore, T&D for awareness and adequate knowledge is necessary to minimize the number of errors and enhance the safety of workers. Prior literature has highlighted several challenges relating to training needs, for instance, electro-chemical trouble-shooting skills (Swezey *et al.*, 1991), and problem-solving performance (Jonassen, 2010).

There are several reasons that justify the selection of public sector universities for the current research. First, several studies have demonstrated a high rate of turnover intention among Pakistani universities' academic staff (Ashraf *et al.*, 2016; Chughtai & Zafar, 2006). These results warrant the need for further validation of the results so that policymakers can be warned of the consequences of this alarming behavior. Second, public sector universities have the largest chunk of students being enrolled every year. Therefore, it is highly critical to study workforce behavior in these universities. Third, employment in Public Sector universities is generally considered more secure as compared to the private sector. And if this sector has started experiencing this negative behavior, then it is highly alarming. There is a dire need to know the factors responsible for the development of this behavior. Fourth, all public sector universities are similar in nature and functions and are governed under the same rules and regulations of the Higher Education Commission and the Ministry of Education. This uniformity gives them the advantage of being easily affected by policies at the government level and it is easy for the government to bring changes that may affect workforce behavior more easily. Fifth,

previous literature emphasizes the need for further investigating the factors that affect workplace outcomes within the context of public sector organizations in Pakistan (Shah *et al.*, 2021). Lastly, the relationship of T&D with turnover intention and job performance is not fully explored in the academic settings of Pakistan. Therefore, this research intends to bridge this gap by investigating the effect of T&D on job performance and turnover intention as a mediator in the said relationship in the context of public sector universities of Khyber-Pakhtunkhwa, Pakistan.

Hypotheses development

Training & development and job performance

Literature shows that well-trained, resilient, and skilled employee faces fewer issues in performing tasks in comparison to those employees who did not receive sufficient training as well as digital learning (Ullah *et al.*, 2020; Yasir *et al.*, 2022). Employees face increasing challenges in their work practices due to the evolving nature of job responsibilities and the continuous pursuit of organizational goals. Therefore, employees need to acquire adequate knowledge and skills to effectively navigate these challenges. Without proper training and development, they may encounter difficulties in adapting to changes and achieving professional growth. As getting training is a continuous process to tackle problems and challenges happening almost daily, therefore, it is very helpful for employees to get proper training and skills to overcome these hurdles in an effective manner (Imran & Tanveer, 2015). The study of Bhardwaj and Naaz (2023) highlights that continuous training and development is so much necessary for the proper development of employees. Recently, Adhikari (2023) found a significant effect of T&D on employee performance in the context of Nepal. On the base of the aforementioned studies, following hypothesis is proposed.

H₁: Training and development of employees is significantly and positively related to job performance.

Training & development and turnover intention

Research consistently indicates that providing training can help reduce employee turnover behavior. For instance, a study conducted by LinkedIn found that 94% of employees would stay longer with an employer who invested in their learning and development. A well-trained and skilled employee becomes a valuable asset to the organization, enabling them to apply their expertise effectively. This enhances their job focus and satisfaction, ultimately reducing the likelihood of turnover (De Winne & Sels, 2010). Recently, Messe and Greenan (2023) found that training and development increase the skill of the employees and further it can also decrease the ratio of the turnover intention of the employees. Albitoosh *et al.* (2022) also found that T&D decreases the employees' turnover intention. Thus, it is proposed that:

H₂: Training and development of employees is significantly and negatively related to turnover intention.

Turnover intention and job performance

Educational institutions need to retain competent staff members, as every successful educational institution depends on teachers' excellence (i.e. if a teacher performs well definitely exceeding the expectations) (Imran *et al.*, 2017). Turnover intentions signal employees' planned intent to hunt out alternative employment opportunities. Moreover, an in-role performance which is also known as task performance specifies the formal work activities in which the employees are anticipated to execute as specified in their job contracts (Borman & Motowidlo, 1997). Recent literature shows that turnover intention is negatively related to employee performance (Nuhn *et al.*, 2019; Otache & Inekwe, 2022). Thus, the following hypothesis is proposed.

H₃: Turnover intention of employees is significantly and negatively related to job performance.

Mediating role of turnover intention

Previous literature has identified that turnover intention mediates between co-worker support and social loafing behaviors (Akgunduz & Eryilmaz, 2018). Moreover, prior literature also identified that turnover intention mediates the effects of commitment and involvement on turnover (Sjöberg & Sverke, 2000). Thus, the current research proposes that turnover intention mediates between T&D and job performance (see Figure 1). Hence, the last hypothesis is proposed as follows.

H₄: Turnover intention of employees mediates the relationship between training and development and job performance.

Framework

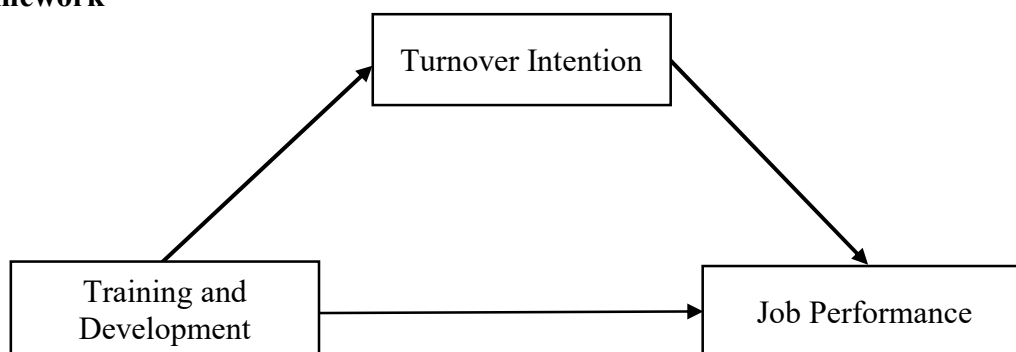


Figure 1: Conceptual framework

Methodology

Current study is having a positivist philosophy, deductive approach, employed a survey strategy, utilized quantitative methodology and the design of this study is cross-sectional. Data was collected through a drop-and-collect survey method (Hashim *et al.*, 2017). In addition, data was collected from faculty members of the public sector HEIs in Khyber Pakhtunkhwa, Pakistan. The selection of respondents is based on the convenience sampling method. Prior studies has also used a convenient sampling method in the services sector of Pakistan (Ali *et al.*, 2021; Yasir & Javed, 2024). Three hundred survey questionnaires were distributed among the faculty of which returned questionnaire were 211.

A questionnaire having five-point Likert scale (1=strongly disagree to 5=strongly agree) is used. The T&D construct is measured using a seven-item scale provided by Gidey (2016). Turnover Intention is measured with a four-item scale provided by Crossley *et al.* (2002) and job performance is measured with a seventeen-item scale provided by Odle-Dusseau *et al.* (2012). The understudy questionnaires were entered into SPSS software data sheets for data analysis.

Analysis

This research aimed to investigate turnover intention as a mediator between T&D and job performance. The analysis in this study is conducted through SPSS software. Cronbach alpha was analyzed to measure the data's internal consistency. Its value for training and development was 0.858, turnover intention was 0.860, and job performance was 0.917, which is in the acceptable range. Moreover, both multivariate and uni-variate normality were analyzed. Multivariate normality was analyzed by histogram and scatter plot. Following Figure 2 shows the results.

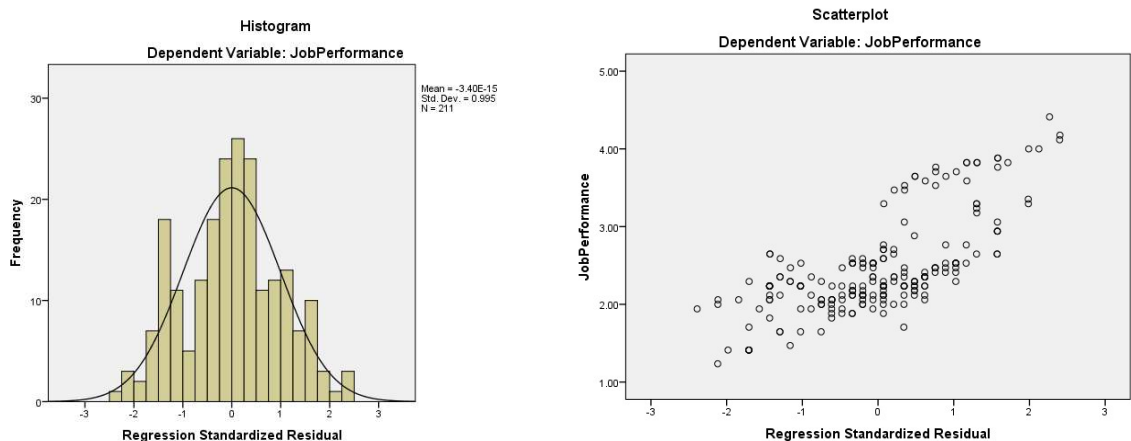


Figure 2: Histogram and Scatterplot

From Figure 2, it can be identified that there exists a bell-shaped curve which indicates that data is normally distributed. The aforementioned Figure 2 further highlights that data distribution is normal. Moreover, the skewness and kurtosis values were analyzed to check the univariate normality.

Table 1: Normality test

	Mean		Std. Dev	Variance	Skewness		Kurtosis	
	Statistic	Std. Error			Statistic	Std. Error	Statistic	Std. Error
TD1	2.4739	.05983	.86906	.755	.806	.167	-.561	.333
TD2	2.3365	.06533	.94896	.901	.833	.167	-.128	.333
TD3	2.8531	.06274	.91142	.831	.181	.167	-1.388	.333
TD4	2.7962	.06986	1.01474	1.030	.170	.167	-1.283	.333
TD5	2.5118	.06422	.93279	.870	.658	.167	-.734	.333
TD6	2.5355	.06382	.92706	.859	.836	.167	-.336	.333
TD7	2.4645	.05710	.82947	.688	1.024	.167	.138	.333
JP1	2.5782	.06608	.95981	.921	.574	.167	-.595	.333
JP2	2.7014	.06755	.98123	.963	.355	.167	-1.064	.333
JP3	2.2986	.06161	.89493	.801	.783	.167	.012	.333
JP4	2.4645	.05981	.86872	.755	.748	.167	-.123	.333
JP5	2.3412	.05689	.82644	.683	.875	.167	.072	.333
JP6	2.4597	.05941	.86302	.745	.844	.167	-.059	.333
JP7	2.4597	.06274	.91132	.831	.635	.167	-.340	.333
JP8	2.3649	.06767	.98295	.966	.671	.167	-.442	.333
JP9	2.4408	.06338	.92069	.848	.786	.167	-.297	.333
JP10	2.1991	.06260	.90932	.827	.823	.167	-.019	.333
JP11	2.5403	.07211	1.04746	1.097	.482	.167	-.775	.333
JP12	2.9242	.07059	1.02536	1.051	.153	.167	-1.196	.333
JP13	2.5071	.06422	.93284	.870	.352	.167	-.866	.333
JP14	2.6398	.06627	.96270	.927	.357	.167	-1.091	.333
JP15	2.4550	.06379	.92665	.859	.785	.167	-.050	.333
JP16	2.2417	.05347	.77666	.603	.966	.167	1.035	.333
JP17	2.1611	.06130	.89048	.793	.903	.167	.794	.333
TI1	3.2275	.06869	.99781	.996	-.557	.167	-.990	.333
TI2	3.0711	.06784	.98545	.971	-.264	.167	-1.185	.333
TI3	3.3128	.06327	.91899	.845	-.625	.167	-1.133	.333
TI4	3.0569	.06971	1.01258	1.025	-.448	.167	-.947	.333

Table 1 indicates that skewness and kurtosis values are within the acceptable range of ± 2 (Kline, 2015). Moreover, Harman's single-factor analysis is utilized for analyzing Common Method Bias.

Table 2: Common method bias

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	Percent of Variance	Cumulative Percent	Total	Percent of Variance	Cumulative Percent
1	11.244	40.158	40.158	10.659	38.069	38.069
2	2.209	7.889	48.047			
3	1.449	5.176	53.223			
4	1.207	4.311	57.534			
5	1.175	4.195	61.729			
6	.948	3.386	65.115			
7	.928	3.315	68.430			
8	.856	3.059	71.489			
9	.838	2.993	74.482			
10	.707	2.525	77.006			
11	.673	2.405	79.411			
12	.648	2.314	81.725			
13	.520	1.857	83.582			
14	.507	1.809	85.392			
15	.477	1.704	87.096			
16	.418	1.495	88.590			
17	.390	1.394	89.984			
18	.376	1.342	91.326			
19	.352	1.256	92.582			
20	.321	1.146	93.728			
21	.300	1.071	94.799			
22	.263	.940	95.739			
23	.246	.878	96.616			
24	.231	.826	97.442			
25	.219	.781	98.224			
26	.179	.639	98.862			
27	.165	.588	99.451			
28	.154	.549	100.000			

Extraction Method: Principal Axis Factoring.

Results shown in Table 2 indicate an overall variance of 38.069%, (less than the 50% threshold) hence, indicating the nonexistence of CMB. Furthermore, a total of 300 questionnaires were distributed of which 211 completed questionnaires were utilized for data analysis. Thus, the current study has an acceptable response rate (70.33%) for

conducting analysis. Furthermore, the demographic details of the understudy sample are as follows.

Table 3: Demographic detail

Gender	Frequency	Percent	Cumulative Percent
Male	140	66.4	66.4
Female	71	33.6	100.0
Total	211	100.0	
Age	Frequency	Percent	Cumulative Percent
25-35 years	38	18.0	18.0
36-45 years	160	75.8	93.8
46-55 years	13	6.2	100.0
Total	211	100.0	
Experience	Frequency	Percent	Cumulative Percent
<1 year	32	15.2	15.2
1-5 year(s)	112	53.1	68.2
6-10 years	35	16.6	84.8
>10 years	32	15.2	100.0
Total	211	100.0	
Education	Frequency	Percent	Cumulative Percent
Graduate	94	44.5	44.5
Postgraduate	109	51.7	96.2
Other	8	3.8	100.0
Total	211	100.0	

Table 3 highlights that the understudy data sample is comprised of 140 male and 71 female respondents. Individuals aged 25 - 35 years were 38 persons, 35 - 45 years were 160 persons and 46 - 55 years were 13 persons. Individuals having experience below 1 year were 32 persons, 1 to 5 year(s) were 112 persons, 6 to 10 years were 35 persons and more than 10 years were 32 individuals. The respondents' education level, for instance, graduates were 94 individuals, postgraduates were 109 individuals, and others were 8 individuals. Moreover, the current study's descriptive statistics results are as follows.

Table 4: Descriptive Statistics

Constructs	Mini	Max	Mean	Std. Dev
Job Performance	1.24	4.41	2.4575	.60541
Turnover Intention	1.50	4.50	3.1671	.82172
Training & Development	1.14	4.29	2.5674	.65834

Cronbach's Alpha (CA) is analyzed in order to check the data internal consistency. CA value for training and development is 0.841, which is above the acceptable range that is 0.7. CA value for turnover intention is 0.860, which is above the acceptable range. CA

value for job performance is 0.917, which is also in the acceptable range. Furthermore, the understudy correlation test was conducted as shown in the subsequent table.

Table 5: Correlation analysis

		Job Performance	Turnover Intention	Training Development
Job Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	211		
Turnover Intention	Pearson Correlation	-.631**	1	
	Sig. (2-tailed)	.000		
	N	211	211	
Training Development	Pearson Correlation	.669**	-.699**	1
	Sig. (2-tailed)	.000	.000	
	N	211	211	211

Table 5 indicates a significant and positive link between T&D and job performance ($r = -0.669, p < .01$). Significant and negative association exists between T&D and turnover intention ($r = -.699, p < .01$). And a significant and negative relationship exists between turnover intention and job performance ($r = -.631, p < .01$). Furthermore, following are the regression analysis of the understudy framework.

Table 6: T&D and job performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.877	.125		7.005	.000
	Training Development	.615	.047	.669	13.020	.000
a. Dependent Variable: Job Performance						
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate		
1	.669 ^a	.448	.445	.45093		

Table 6 shows a positive and significant effect of T&D on job performance ($\beta=0.615, t=13.020, p < 0.001$) hence H_1 is supported.

Table 7: T&D and turnover intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.406	.164		33.016	.000
	Training Development	-.872	.062	-.699	-14.112	.000

a. Dependent Variable: Turnover Intention

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.699 ^a	.488	.485	.58941

Table 7 shows a negative and significant effect of T&D on turnover intention ($\beta = -.872$, $t = -14.112$, $p < 0.001$) hence H₂ is supported.

Table 8: Turnover intention and job performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.931	.129		30.404	.000
	Turnover Intention	-.465	.040	-.631	-11.772	.000

a. Dependent Variable: Job Performance

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.631 ^a	.399	.396	.47059

Table 8 indicates a negative and significant effect of turnover intention on job performance ($\beta = -.465$, $t = -11.772$, $p < 0.001$) thus H₃ is supported.

Table 9: T&D, turnover intention and job performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.877	.125		7.005	.000
	Training Development	.615	.047	.669	13.020	.000
2	(Constant)	2.153	.298		7.228	.000

Training Development	.410	.063	.446	6.506	.000
Turnover Intention	-.236	.050	-.320	-4.674	.000

a. Dependent Variable: Job Performance

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.669 ^a	.448	.445	.45093
2	.707 ^b	.500	.496	.43000

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.472	1	34.472	169.529	.000 ^b
	Residual	42.498	209	.203		
	Total	76.971	210			
2	Regression	38.512	2	19.256	104.145	.000 ^c
	Residual	38.459	208	.185		
	Total	76.971	210			

Table 9 indicates that turnover intention plays a mediating role between T&D and job performance. Furthermore, the beta weight reduced from .669 to .446 and is still significant hence indicating a partial mediation (Baron & Kenny, 1986).

Discussion

This research examined the underlying psychological mechanism that links T&D with job performance through turnover intention as a mediating variable. Results of the current research showed that T&D is positively associated with job performance. The findings of this research are similar to that of the prior studies which also show a positive link between T&D and job performance (Adhikari, 2023). Hence, T&D can influence employees' job performance specifically in the context of the public sector higher education institutions of Khyber Pakhtunkhwa.

The current research findings indicate a negative link between T&D and turnover intention. This study's results are in line with prior literature which shows that training and development decrease the ratio of employee turnover intention and vice versa (Altoosh *et al.*, 2022; Messe & Greenan, 2023). Hence, T&D can negatively influence turnover intention meaning that the higher the level of T&D, the lower the level of turnover intention and vice versa. Furthermore, the findings of this research highlight the negative association between turnover intention and job performance. The findings of this research are in line with those of the prior research which show a negative link between turnover intention and job performance (Nuhn *et al.*, 2019; Otache & Inekwe, 2022). Thus, the presence of higher turnover intention can negatively influence employees' job

performance. Hence, the higher the level of turnover intention, the lower will be the level of job performance and vice versa.

Current study results reveal that turnover intention mediates the relationship between training and development (T&D) and job performance, indicating that T&D influences job performance both directly and indirectly. Given the crucial role of the work environment in an organization (Yasir *et al.*, 2017), fostering a culture that prioritizes training and development is essential for enhancing employee growth, reducing turnover intention, and improving overall organizational effectiveness.

Moreover, this research addresses the literature gap thereby examining turnover intention as a mediator between T&D and job performance in the Khyber Pakhtunkhwa public-sector universities. Current study results show that turnover intention mediates between T&D and job performance. The current research implies that the top management of the public sector university of Khyber Pakhtunkhwa needs to focus on providing training and development programs thereby to reduce the employee's turnover intention which leads towards influencing the job performance of the employees. Thus, policymakers should promote continuous learning to strengthen the education sector. Hence, workshops and training programs need to be conducted for the faculty which will influence turnover intention leading towards maximizing the faculty job performance specifically in the public sector universities of Khyber Pakhtunkhwa.

This research has several limitations as well as suggestions for further research. For instance, this study is based on the sample from the public sector universities of Khyber Pakhtunkhwa only, thus, future research is needed thereby to investigate the understudy framework in other sectors and cultures. Moreover, this study has utilized a convenient sampling technique and the sample size of this study is relatively low, thus, further research is needed to utilize a probability sampling technique and have a higher sample size. Furthermore, this research has used turnover intention as a mediating variable, however, future research is needed thereby to explore another mediator between the understudy framework. Lastly, this study is cross-sectional, further research is needed thereby to examine the understudy framework through a longitudinal research design.

Conclusion

This study aimed to examine turnover intention as a mediator between T&D and job performance among faculty members in public sector HEIs of Khyber Pakhtunkhwa. Findings of this research show that T&D and turnover intention play a significant role in contributing to the faculty job performance level. Therefore, senior management and policymakers should emphasize faculty training and development, as it not only strengthens employees' skills and competencies but also significantly contributes to lowering turnover intention. Thus, by fostering a supportive and growth-oriented work

environment, institutions can improve faculty retention and ultimately enhance job performance in public sector universities of Khyber Pakhtunkhwa.

References

- Akgunduz, Y., and Eryilmaz, G. (2018). Does turnover intention mediate the effects of job insecurity and co-worker support on social loafing? *International Journal of Hospitality Management*, 68, 41-49.
- Al-Mzary, M. M. M., Al-rifai, A. D., and Al-Momany, M. O. E. (2015). Training and Its Impact on the Performance of Employees at Jordanian Universities from the Perspective of Employees: The Case of Yarmouk University. *Journal of Education and Practice*, 6(32), 128-140.
- Altoosh, Q., Ngah, A. H., and Yusoff, Y. M. (2022). Training satisfaction relative to turnover intention: the mediating role of employee loyalty. *Industrial and Commercial Training*, 54(4), 545-565.
- Ali, J., Yasir, M., Adil, M., and Siddique, M. (2021). Ethical Leadership and Employees' Trust Matters in Mitigating Employees' Burnout. *Elementary Education Online*, 20(4), 1319-1329.
- Ashraf, M., Ahmad, N., and Haider, S. (2016). Antecedents of turnover intentions: A study of karachi business schools. *Journal of Business Studies*, 12(1), 139-156.
- Aziz, F., and Akhtar, M. M. S. (2014). Impact of training on teachers competencies at higher education level in Pakistan. *Researchers World*, 5(1), 121.
- Baron, R. M., and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bersin, J. (2013). Employee retention now a big issue: Why the tide has turned. *Bersin by Deloitte*, 16, 1-4.
- Bhardwaj, M., and Naaz, R. (2023). Impact of Training and Development on Employee Engagement and Satisfaction in It Industry. *European Economic Letters (EEL)*, 13(3), 23-27.
- Borman, W. C., and Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human performance*, 10(2), 99-109.
- Chughtai, A. A., and Zafar, S. (2006). Antecedents and consequences of organizational commitment among Pakistani university teachers. *Applied HRM research*, 11(1), 39.
- Crossley, C., Grauer, E., Lin, L., and Stanton, J. (2002). *Assessing the content validity of intention to quit scales*. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Toronto, Ontario, Canada.
- De Winne, S., and Sels, L. (2010). Interrelationships between human capital, HRM and innovation in Belgian start-ups aiming at an innovation strategy. *The International Journal of Human Resource Management*, 21(11), 1863-1883.
- Dias, A., and Silva, R. (2016). Organizational training and organizational commitment: a literature review and conceptual development. *International Journal of Innovative Science, Engineering & Technology*, 3(1), 387-399.
- Dogan, S., and Aydin, B. (2012). The relationship between organizational value and organizational commitment in public and private Universities. *African Journal of Business Management*, 6(6), 2107.

- Dysvik, A., and Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation and employee outcomes. *International journal of training and development*, 12(3), 138-157.
- Elnaga, A., and Imran, A. (2013). The effect of training on employee performance. *European Journal of Business and Management*, 5(4), 137-147.
- Gidey, A. (2016). The effect of training and development on employees performance: the case of commercial bank of Ethiopia. *Unpublished MSc. thesis, School of Commerce, the Addis Ababa University, Ethiopia*.
- Habib, M., Mukhtar, S., and Jamal, W. (2010). Factors Influencing the Teachers Intentions to Quite in Private Sector Higher Educational Institutions of Pakistan. *Interdisciplinary Journal of Contemporary Research Business*, 1(12).
- Hashim, M., Khan, M. A., Ullah, M., and Yasir, M. (2017). Impact of Servant Leadership on Employees' Loyalty of Private Universities Academicians in Pakistan. *City University Research Journal*, 96-111.
- Imran, M., and Tanveer, A. (2015). Impact of training & development on employees' performance in banks of pakistan. *European journal of training and development studies*, 3(1), 22-44.
- Imran, R., Allil, K., and Mahmoud, A. B. (2017). Teacher's turnover intentions: Examining the impact of motivation and organizational commitment. *International Journal of Educational Management*, 31(6), 828-842.
- Jonassen, D. H. (2010). *Learning to solve problems: A handbook for designing problem-solving learning environments*: Routledge.
- Kesen, M. (2016). The impact of employee training and innovation on turnover intention: An empirical research. *International Journal of Academic Research in Business and Social Sciences*, 6(1), 174-185.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*: Guilford publications.
- Kum, F. D., Cowden, R., and Karodia, A. M. (2014). The impact of training and development on employee performance: A case study of ESCON Consulting. *Singaporean Journal of Business Economics and Management Studies*, 3(3), 72-105.
- Lawrence, J., Ott, M., and Bell, A. (2012). Faculty organizational commitment and citizenship. *Research in Higher Education*, 53, 325-352.
- Maryam, S. Z., Ali, F., Rizvi, M., and Farooq, S. (2021). Demonstrating the motivational scale for commitments toward teachers' turnover intentions using self-determination theory: a case of higher education institutions in Pakistan. *International Journal of Educational Management*, 35(2), 365-381.
- Messe, P.-J., and Greenan, N. (2023). Knowledge transmission in the second part of careers: does formal training matter? *International Journal of Manpower*.
- Nuhn, H. F., Heidenreich, S., and Wald, A. (2019). Performance outcomes of turnover intentions in temporary organizations: A dyadic study on the effects at the individual, team, and organizational level. *European Management Review*, 16(2), 255-271.
- Odle-Dusseau, H. N., Britt, T. W., and Greene-Shortridge, T. M. (2012). Organizational work-family resources as predictors of job performance and attitudes: The process of work-family conflict and enrichment. *Journal of Occupational Health Psychology*, 17(1), 28.

- Onah, F. O., and Anikwe, O. S. (2016). The task of attraction and retention of academic staff in Nigeria universities. *Journal of Management and Strategy*, 7(2), 9-20.
- Otache, I., and Inekwe, E.-O. I. (2022). The relationship between job satisfaction, turnover intentions and performance of Nigerian polytechnic lecturers with doctorate degrees. *Journal of Applied Research in Higher Education*, 14(2), 762-783.
- Raza, S. A., Majid, Z., and Zia, A. (2010). Perceptions of Pakistani University Students about Roles of Academics Engaged in Imparting Development Skills: Implications for Faculty Development. *Bulletin of Education & Research*, 32(2).
- Senders, J. W., and Moray, N. P. (1991). *Human Error: Cause, prediction, and reduction*: Lawrence Erlbaum Association.
- Shah, S. A. H., Shah, T. A., Ullah, A., and Yasir, M. (2021). Workplace Deviance in Public Sector Organizations: Evidence from Pakistan. *Journal of Applied Economics and Business Studies*, 5(1), 67-82.
- Sjöberg, A., and Sverke, M. (2000). The interactive effect of job involvement and organizational commitment on job turnover revisited: A note on the mediating role of turnover intention. *Scandinavian Journal of Psychology*, 41(3), 247-252.
- Swezey, R. W., Perez, R. S., and Allen, J. A. (1991). Effects of instructional strategy and motion presentation conditions on the acquisition and transfer of electromechanical troubleshooting skill. *Human Factors*, 33(3), 309-323.
- Ullah, A., Baharun, R. B., Yasir, M., and Nor, K. M. (2020). Enterprise Resource Planning Systems and User Performance in Higher Education Institutions of Pakistan. *Journal of Applied Economics and Business Studies*, 4(2), 119-140.
- Ullah, M. H., Khan, M. N. U., Murtaza, A., and Din, M. N. U. (2011). Staff development needs in Pakistan higher education. *Journal of College Teaching & Learning (TLC)*, 8(1).
- Yasir, M., and Javed, A. (2024). Ethical leadership, employees' job satisfaction and job stress in the restaurant industry. *foresight*. doi: <https://doi.org/10.1108/FS-03-2023-0038>
- Yasir, M., Rasli, A., and Qureshi, M. I. (2017). Investigation of the Factors that Affect and Gets Affected by Organizational Ethical Climate. *Advanced Science Letters*, 23(9), 9351-9355. doi: <https://doi.org/10.1166/asl.2017.10479>
- Yasir, M., Ullah, A., Siddique, M., Hamid, Z., and Khan, N. (2022). The Capabilities, Challenges, and Resilience of Digital Learning as a Tool for Education During the COVID-19. *International Journal of Interactive Mobile Technologies (IJIM)*, 16(13), pp. 160-174. doi: 10.3991/ijim.v16i13.30909
- Zhang, Q., Li, X., and Gamble, J. H. (2022). Teacher burnout and turnover intention in higher education: The mediating role of job satisfaction and the moderating role of proactive personality. *Frontiers in Psychology*, 13.