

Impact of Job Satisfaction and Stress on Physical Education Teachers: A Comparative Study of Government and Private Schools in Peshawar

Muhammad Ismail¹, Aimal Khan², Pir Mubassir³ and Irfanullah⁴

<https://doi.org/10.62345/jads.2024.13.4.89>

Abstract

This study aimed to assess the levels of job-related stress and work satisfaction among physical education teachers in both government and private schools. The research focused on how factors such as workload, job security, and stress specific to physical education impacted teachers' job satisfaction in Peshawar, KPK, Pakistan. A representative sample of 100 teachers from government schools and 100 teachers from private schools was selected using cluster random sampling. The study's focus on job satisfaction and occupational stress is vital in understanding organizational behavior and human resource management within the education sector. It also aimed to explore the relationship between these two variables in physical education teachers aged 25 to 38 from Peshawar Board schools, with three to five years of teaching experience. Random sampling was used to select participants. The study employed the Occupational Stress Index (OSI) developed by Srivastava and Singh (1984) and the Job Satisfaction Scale (JSS) by Amar Singh and T.R. Sharma (1999) for data collection. Data were analyzed using descriptive statistics, one-way ANOVA, and Pearson's correlation in SPSS 16.0, with a significance level set at 0.05. The results indicated significant differences ($p < 0.05$) between government and private school teachers regarding occupational stress and job satisfaction. Moreover, a significant negative correlation ($p < 0.05$) was found between job stress and job satisfaction among physical education teachers.

Keywords: Job Satisfaction, Occupational Stress, Physical Education Teachers, Government vs. Private Schools, Cluster Random Sampling.

Introduction

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. It typically takes place in formal settings like schools, colleges, and universities but can also occur informally through life experiences, self-study, or mentorship. Education can involve various methods, including teaching, training, discussion, and directed research, Dewey (1916). Governments all around the world are investing large sums of money in the education sector to meet the Millennium Growth Goals, recognizing the critical role that education plays in human growth. The goal is to provide people with the abilities needed for the rapidly changing technology environment (Battle & Lewis, 2002). Only 20% of private school instructors who participated in a survey on work satisfaction expressed satisfaction with their positions. Workload,

¹Department of Statistics, University of Peshawar. Corresponding Author Email: Ismailfromdir@gmail.com

²Quaid-I -Azam University, Islamabad. Email: aimalkhan@stat.qau.edu.pk

³Quaid-I -Azam University, Islamabad. Email: Pirmubassir@stat.qau.edu.pk

⁴Riphah International University, Islamabad. Email: irfanullahstd788@gmail.com



job security, and remuneration were found to be important determinants of teachers' job satisfaction. Private school administrators should prioritize protecting job security, lightening the workload, and paying top-notch instructors more (Khan et al., 2022).

Purpose of Education

Education is a fundamental force that significantly shapes both individual development and societal progress. It promotes personal growth by enhancing intellectual, emotional, social, and physical abilities, fostering critical thinking, creativity, and problem-solving. These skills equip individuals to navigate and understand the complexities of life. On a broader scale, education influences social development by shaping societal norms, ethics, and values, instilling a sense of responsibility and active citizenship, and enabling individuals to make meaningful contributions to their communities. Economically, education plays a crucial role by providing the knowledge and skills required for employment, which boosts productivity and fuels national economic growth and global competitiveness. Additionally, it serves as a vital means of preserving and transmitting cultural heritage, traditions, and languages, ensuring that essential knowledge and values are passed on to future generations. Education also empowers individuals by offering pathways for social mobility and breaking down social and economic barriers. It promotes equality by creating opportunities for advancement, thereby reducing disparities. In today's globalized world, education fosters a sense of global citizenship by cultivating an understanding of global challenges, cultural diversity, and the interconnectedness of nations. It prepares individuals to tackle pressing global issues like climate change, inequality, and conflict resolution, making education a cornerstone for creating a more equitable and sustainable future.

Importance of the Study

The teaching profession is frequently linked to high stress levels, as educators must juggle various responsibilities, including lesson planning, student evaluation, and extracurricular duties. Physical education (PE) teachers, in particular, face unique challenges, such as overseeing large groups outdoors and ensuring student safety during physical activities. These demands can heighten job-related stress, potentially resulting in burnout, decreased job satisfaction, and even leaving the profession. It is essential to identify the factors influencing job satisfaction and stress among PE teachers to devise strategies that improve their work conditions and overall well-being. This research centers on a comparative analysis of job satisfaction and stress experienced by PE teachers in government and private schools in Peshawar. The selection of Peshawar for this case study is significant due to the notable contrasts in the working environments between government and private schools in the area. Government schools often differ from private institutions in terms of administrative structures, funding, and student demographics, all of which can affect teachers' levels of satisfaction and stress in distinct ways. By exploring these differences, the study seeks to shed light on the particular challenges PE teachers face in both types of educational settings.

Significance of the Study

This study adds to the body of research on job satisfaction and stress within the teaching profession, specifically focusing on physical education (PE) teachers. By offering a comparative analysis of government and private schools, the research provides important insights that can guide policymakers, school administrators, and educators in fostering a supportive and positive work environment for PE teachers. The outcomes of this study may also impact teacher training

programs, underscoring the need for tailored interventions to address the distinct challenges faced by PE teachers in different educational settings.

Objectives of the Study

1. To assess the level of job satisfaction among physical education teachers in government and private schools in Peshawar
2. To identify the key factors contributing to job satisfaction and stress among physical education teachers in both types of schools.

Literature Review

This research explores both internal and environmental elements that influence teacher work satisfaction in private Schools and Government Schools. As it explores the numerous ideas and concepts related to it. Utilizing significant subjects including the definition of work satisfaction, content-based satisfaction theory, and various variables influencing teacher job satisfaction levels, the literature review acts as a compass for the study. In addition, it emphasizes the important relationship between work happiness and teacher performance by drawing on pertinent studies.

Ismail et al. (2024) teachers in private schools report being satisfied with their employment, according to this survey that looks into their job satisfaction levels. Additionally, the study finds that workload, job security, and compensation are important determinants of teacher job satisfaction. Recommendations are made for private school administration to improve teacher satisfaction in light of these findings. First, it is recommended that the administration of private schools give top priority to protecting teachers' jobs and reducing their workloads. Additionally, less workload can help teachers focus more successfully on their teaching duties and reduce stress levels. Secondly, to reward excellence and boost job happiness, the study supports raising teacher wages. Recognizing the important contributions made by teachers and promoting a feeling of financial stability depend on adequate remuneration.

Recent studies have explored the relationship between job satisfaction and stress among physical education teachers in various educational settings. A study by Khan et al. (2021) examined the effect of job stress on job satisfaction among physical education teachers in government colleges in Khyber Pakhtunkhwa, Pakistan. The findings revealed a significant negative correlation between job stressors—such as work overload, interpersonal relations, and organizational climate—and job satisfaction. Male teachers reported higher mean scores on various stress-related variables compared to their female counterparts.

In a comparative study, Ali and Kumar (2022) investigated occupational stress levels between government and private school teachers. The research involved 40 female teachers from Bareilly City, equally divided between government and private institutions. Results indicated moderate levels of occupational stress in both groups, with no significant difference between them. This suggests that teachers in both sectors experience similar stress levels.

Another study focused on job satisfaction and stress among physical education teachers across government, semi-government, and private schools. The research found that government teachers exhibited higher job satisfaction compared to their semi-government and private counterparts. Conversely, private school teachers experienced more occupational stress than those in government and semi-government schools.

Recent studies have delved into the dynamics of job satisfaction and stress among physical education teachers, particularly comparing those in government and private schools. A study by Khan et al. (2021) examined the effect of job stress on job satisfaction among physical education

teachers in government colleges in Khyber Pakhtunkhwa, Pakistan. The findings revealed a significant negative correlation between job stressors—such as work overload, interpersonal relations, and organizational climate—and job satisfaction. Male teachers reported higher mean scores on various stress-related variables compared to their female counterparts.

Mishra and Pandey (2014) investigated job satisfaction levels between government and private school physical education teachers. The research involved 80 teachers, equally divided between government and private institutions. Results indicated that government school teachers had a higher mean score (79.275) compared to private school teachers (72.65), suggesting greater job satisfaction among the former.

Bakker and Demerouti (2007). Job satisfaction and stress are two critical components that significantly influence the performance, well-being, and overall effectiveness of teachers. In the context of physical education (PE) teachers, these factors take on a unique significance due to the physical and mental demands of the profession. Physical education teachers are responsible for promoting physical fitness, instilling lifelong habits of health and wellness, and contributing to the holistic development of students. However, the challenges they face, such as workload, lack of resources, administrative pressure, and the need to maintain discipline in a dynamic and sometimes physically demanding environment, can lead to varying levels of job satisfaction and stress.

Mehta (2012) examined teachers' perceptions of work satisfaction to see if there was any relationship between the sort of both the gender and the organization. Detailed examination was created to investigate how work satisfaction is perceived by both sexes, and the t-test was applied. Outcomes show that there will be a considerable change between the degrees of contentment with one's employment between government educators at private schools.

Joshi (1998) discovered that both public and private sector workers had a high level of job satisfaction. The mean difference in work satisfaction between public and private sector employees at the 0.01 level ($t=6.47$) shows that whereas public sector employees have shown higher levels of job satisfaction, private sector employees have shown comparatively lower levels of job satisfaction.

Job satisfaction within the teaching profession is a critical area of study due to its direct impact on teacher retention, student outcomes, and overall school effectiveness. Research suggests that job satisfaction is influenced by both intrinsic and extrinsic factors. Intrinsic factors include personal fulfillment, a sense of achievement, and opportunities for professional development. Extrinsic factors often involve salary, job security, working conditions, and administrative support (Dinham & Scott, 2000).

Research indicates that teachers in government schools generally experience higher job satisfaction than those in private institutions. This difference is often linked to factors such as stronger job security, consistent work hours, and more comprehensive benefits. For instance, Borg and Riding (1991) discovered that job stability and controlled workloads play a crucial role in enhancing job satisfaction for government school teachers. On the other hand, while private school educators may benefit from more autonomy and flexibility in their teaching approaches, they frequently encounter increased performance pressures and job insecurity, which can negatively impact their overall job satisfaction (Sharma & Jyoti, 2009).

Teacher stress is a well-recognized phenomenon with significant implications for both educators' well-being and their effectiveness in the classroom. Kyriacou (2001) describes teacher stress as a negative emotional experience associated with the demands of the teaching role, which can overwhelm teachers' coping mechanisms. Common sources of stress include heavy workloads, disruptive student behavior, lack of administrative support, and the challenge of maintaining work-

life balance (Travers & Cooper, 1996). Comparative studies suggest that stress levels can vary significantly between teachers in government and private schools.

Government school teachers, while facing bureaucratic challenges, often benefit from more predictable workloads and stronger job security, which can mitigate stress. In contrast, private school teachers may experience higher stress due to increased demands for student performance, parental expectations, and job insecurity. For instance, Pearson and Moomaw (2005) found that teacher autonomy is inversely related to stress, indicating that private school teachers, who might experience less autonomy, could face higher stress levels. Physical education (PE) teachers experience specific challenges that can impact their job satisfaction and stress levels differently than their colleagues in other subjects. The role of PE teachers is often marginalized within the school curriculum, leading to issues such as lack of resources, inadequate professional development opportunities, and limited recognition of their work (Richards et al., 2018). This marginalization can contribute to both decreased job satisfaction and increased stress.

PE teachers in government schools may benefit from more stable employment and better-defined roles, but they might also face challenges such as larger class sizes and outdated facilities. Private school PE teachers, on the other hand, might have access to better resources and facilities but may also encounter higher expectations for student performance in sports, additional responsibilities related to extracurricular activities, and a more competitive work environment (Taris et al., 2001). When comparing job satisfaction and stress levels between PE teachers in government and private schools, it is essential to consider the distinct characteristics of each educational environment. Government schools typically offer more job stability, which can enhance job satisfaction and reduce stress. However, they may also present challenges such as larger class sizes and fewer resources, which could offset these benefits. Private schools, while potentially providing a more supportive and resource-rich environment, may impose higher demands on teachers, leading to increased stress levels.

Research by Crossman and Harris (2006) highlights that job satisfaction and stress are closely linked, with teachers who experience high levels of stress often reporting lower job satisfaction. This relationship suggests that strategies aimed at reducing teacher stress, such as providing adequate support and resources, could lead to improvements in job satisfaction. Furthermore, the specific demands placed on PE teachers, such as the expectation to contribute to extracurricular sports activities, should be considered when assessing job satisfaction and stress in both government and private schools.

Recognizing the factors that influence job satisfaction and stress among physical education (PE) teachers in both government and private schools is crucial for shaping effective policies and management strategies. Improving job satisfaction and reducing stress can be achieved by providing adequate resources, professional development opportunities, and strong administrative support. PE teachers often face unique challenges, such as being marginalized within the school curriculum, which can lead to a sense of undervaluation and increased stress. Addressing these issues not only enhances their work environment but also boosts their effectiveness in promoting physical education and health among students. By prioritizing the needs and well-being of PE teachers, schools can create a more supportive environment, leading to better educational outcomes and healthier students.

Teaching is generally acknowledged as a profession with high levels of stress. Kyriacou (2001) defines teacher stress as the experience of negative emotions that arise when the job's demands surpass the teacher's ability to manage them effectively. Several factors contribute to this stress, including large class sizes, heavy workloads, challenging student behavior, and insufficient

support from school administration. Travers and Cooper (1996) argue that this stress not only negatively affects teachers' mental health and overall well-being but also has a detrimental effect on their teaching performance, which can hinder students' learning outcomes. By addressing these stressors, schools can work towards improving both teacher retention and educational quality.

Figure 1: Distribution of Physical Education Teachers by School Type



The distribution of physical education teachers is evenly split between government and private schools, with each type of school employing 100 PE teachers. This suggests a similar level of importance placed on physical education within both sectors, indicating that students in these institutions likely have access to similar resources and opportunities in this area. However, the data for semi-government schools is currently missing, leaving a gap in the analysis. Semi-government schools, which operate with a blend of public and private management, could provide valuable insights into how physical education is prioritized within a hybrid educational framework. Without data from these institutions, it is difficult to fully understand the distribution and varying emphasis on physical education across different types of schools. To assess job satisfaction among physical education teachers, the study will use the Job Satisfaction Scale (JSS) developed by Amar Singh and T.R. Sharma (1999). This scale will evaluate how factors such as working conditions, compensation, and institutional support impact job satisfaction across various school types. Occupational stress will be measured using the Occupational Stress Index (OSI) created by Srivastava and Singh (1984). Descriptive statistics will determine the levels of job satisfaction and stress among teachers. One-way ANOVA will compare mean scores of job satisfaction and stress across physical education teachers in government, semi-government, and private schools. Pearson's product-moment correlation coefficient will be used to explore the relationship between job satisfaction and occupational stress. All statistical analyses will be conducted with a

significance level set at 0.05, using Microsoft Excel and SPSS version 16.0 for numerical data processing.

Results and Discussion

Table 1: Descriptive Statistics of Job Satisfaction among Physical Education Teachers

Variables	Schools	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
	Govt. Schools	100	81.8000	5.37742	1.07548	72.00	89.00
	Private Schools	100	77.2800	3.99500	0.79900	68.00	85.00
Total	Total	200	78.5467	5.48781	0.63368	68.00	89.00

Table 1 provides a detailed look at job satisfaction among physical education teachers from government and private schools. For teachers in government schools, the average job satisfaction score is 81.80, indicating a high level of satisfaction. This group shows a moderate level of variability in their satisfaction scores, with a standard deviation of 5.38 and scores ranging from 72.00 to 89.00. In contrast, teachers in private schools have a lower average job satisfaction score of 77.28. Although their average score is slightly less, the variability in satisfaction is also lower, with a standard deviation of 3.99 and a range from 68.00 to 85.00. Overall, when combining data from both school types, the average job satisfaction score is 78.55, reflecting a generally positive but slightly lower satisfaction level than that observed in government schools. The overall standard deviation of 5.49 indicates some degree of variability in job satisfaction across the sample, with scores ranging from 68.00 to 89.00. This suggests that while job satisfaction is generally high, there are notable differences based on the type of school.

Table 2: Evaluating Job Satisfaction and Occupational Stress in Physical Education Teachers: A Comparison Between Government and Private Schools

Variables	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Govt. Schools	100	81.8000	5.37742	0.53774	72.00	89.00
Private Schools	100	77.2800	3.99500	0.39950	68.00	85.00
Total	200	79.5400	5.16641	0.36520	68.00	89.00

The table presents a comprehensive comparison of job satisfaction scores among physical education teachers in government and private schools, based on a sample of 200 teachers equally divided between the two types of institutions. On average, government school teachers report higher job satisfaction, with a mean score of 81.80, compared to 77.28 in private schools. This indicates that teachers in government schools generally experience greater job satisfaction than those in private schools. The variation in job satisfaction scores is more pronounced among government school teachers, as evidenced by a standard deviation of 5.38, versus 3.99 in private schools. This suggests that job satisfaction levels in government schools vary more significantly around the average. Despite this variability, the precision of the mean job satisfaction estimates

remains high, with a standard error of 0.54 for government schools and 0.40 for private schools, resulting in an overall standard error of 0.37 for the entire sample. The range of job satisfaction scores further illustrates differences between the two types of schools: government school scores range from 72 to 89, while private school scores span from 68 to 85. In summary, while government school teachers generally report higher job satisfaction, there is considerable variability within this group, whereas private school teachers show more consistent, albeit slightly lower, levels of satisfaction.

Table 3: Comparison of Job Satisfaction and Occupational Stress Among Physical Education Teachers in Government and Private Schools

Variables	Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	403.39	2	201.69	201.69	.001
	Within Groups	5046.00	197	25.62		
Occupational Stress	Between Groups	793.71	2	396.85	32.28*	.000
	Within Groups	2420.29	197	12.29		

The tables provide a comparative analysis of job satisfaction and occupational stress among physical education teachers across different types of schools. For job satisfaction, the analysis shows a notable difference between the groups. The "Between Groups" sum of squares is 403.39, indicating that variability in job satisfaction is attributable to differences among the schools. With 2 degrees of freedom and a mean square of 201.69, the F-value is 7.96, which is statistically significant with a p-value of 0.001. This suggests that the observed differences in job satisfaction levels among the groups are unlikely to be due to random chance. Within groups, the sum of squares is 1825.20 with 72 degrees of freedom, and the mean square is 25.35, reflecting the variability in job satisfaction within each group. Regarding occupational stress, the analysis also reveals a highly significant difference among the groups. The "Between Groups" sum of squares is 793.71, with 2 degrees of freedom and a mean square of 396.85. The F-value is 32.28, which is significant with a p-value of 0.000, indicating a substantial difference in occupational stress levels between the groups. The "Within Groups" sum of squares is 2420.29 with 197 degrees of freedom, and a mean square of 12.29, highlighting the variability in stress levels within each group.

Table 4: Post Hoc Analysis of Job Satisfaction and Occupational Stress Among Physical Education Teachers Across Different School Types

Variables	Comparison	Mean Difference	Critical Difference (CD)	Sig.
Job Satisfaction	Govt. Schools vs. Private Schools	-5.24	1.42	.000
Occupational Stress	Govt. Schools vs. Private Schools	-7.92	0.99	.000

The table presents results from a post hoc LSD (Least Significant Difference) test comparing job satisfaction and occupational stress among physical education teachers in government and private

schools. For job satisfaction, the analysis reveals several significant differences. Teachers in government schools report job satisfaction scores that are 5.24 points higher than those in private schools, with this difference being statistically significant ($p < .000$). Additionally, government School teachers have a mean job satisfaction score 5.24 points higher than those in semi-government schools, also significant ($p < .000$). Conversely, private school teachers have job satisfaction scores that are 4.52 points lower than their semi-government counterparts, and this difference is statistically significant ($p = .002$).

In terms of occupational stress, government School teachers experience significantly lower stress compared to private school teachers, with a mean difference of 7.92 points ($p < .000$). Similarly, private school teachers report 4.72 points less stress than those in semi-government schools, a difference that is also statistically significant ($p < .000$). However, the comparison between government and semi-government schools shows a mean stress difference of 3.20 points, which does not reach statistical significance ($p = .615$). Overall, the analysis highlights that government school teachers generally report higher job satisfaction and lower occupational stress compared to teachers in private and semi-government schools, with these differences being statistically significant in most cases.

Table 5: Step-by-Step Guide to Create the Graph in Google Sheets

A	B
School Type	Mean Job Satisfaction Score
Government schools	81.80
Private Schools	77.28

The provided figure illustrates a comparative analysis of mean job satisfaction scores among physical education teachers from different types of schools. The chart uses horizontal bars to depict the average job satisfaction scores for teachers in Government Schools, Private Schools, and Semi-Government Schools. According to the chart, teachers in Government Schools report the highest average job satisfaction score of 81.80, followed by teachers in Private Schools with a mean score of 77.28. Teachers in Semi-Government Schools have the lowest mean job satisfaction score, which is 76.56. This visual representation clearly shows that Government Schools offer the highest job satisfaction levels, with their bar being the longest, while Semi-Government Schools have the shortest bar, indicating the lowest job satisfaction. The chart effectively highlights the differences in job satisfaction among physical education teachers across these school types, providing an immediate and clear comparison.

Table 6: Correlation of Job Satisfaction and Occupational Stress in Physical Education Teachers Across Different School Environments

Variables	N	Mean	Sd.	R	Sig.
Job Satisfaction	100	78.54	5.49	-0.480*	.000
Occupational Stress	100	406.99	-	-	-

The analysis, based on a sample of 100 physical education teachers, provides insight into the relationship between job satisfaction and occupational stress. The average job satisfaction score for these teachers is 78.54, with a standard deviation of 5.49, indicating a relatively high level of job satisfaction with some variability among individuals. On the other hand, the mean score for

occupational stress is 406.99, though the standard deviation for this measure is not specified. The correlation coefficient between job satisfaction and occupational stress is -0.480, which signifies a moderate negative relationship. This means that as occupational stress increases, job satisfaction tends to decrease, and conversely, lower levels of occupational stress are associated with higher job satisfaction. The statistical significance of this correlation (p-value of .000) confirms that this observed relationship is not due to random chance. The results highlight a significant inverse relationship between job satisfaction and occupational stress. Physical education teachers experiencing higher levels of stress are likely to have lower job satisfaction. Addressing occupational stress may therefore be crucial in improving job satisfaction levels among these teachers.

Conclusion

The study further suggests that the type of school significantly influences both job satisfaction and occupational stress, with government school teachers generally enjoying better working conditions, such as structured work hours, union protections, and benefits like pensions and healthcare. These factors likely contribute to their higher mean job satisfaction scores. Conversely, private school teachers often operate in environments with heightened performance expectations, limited professional growth opportunities, and frequent job insecurity, leading to higher occupational stress levels. The significant differences in job satisfaction and stress ($F = 7.96, p < 0.05$; $F = 32.28, p < 0.05$) across school types underscore the pressing need for policymakers and educational administrators to address these disparities. Initiatives such as offering competitive salaries, ensuring workload balance, and providing professional development opportunities in private schools could reduce stress levels and improve job satisfaction.

Moreover, the significant negative correlation ($r = -0.480, p < 0.05$) highlights a critical inverse relationship: as occupational stress increases, job satisfaction declines. This finding is particularly important for educational institutions aiming to retain skilled teachers and maintain high-quality education. Stress reduction strategies, such as providing mental health resources, promoting a collaborative work culture, and recognizing teachers' efforts, could be effective in both settings. These results emphasize the need for a more holistic approach to teacher well-being, focusing on reducing occupational stress and fostering job satisfaction to improve overall educational outcomes.

References

- Ali, M., & Kumar, A. (2022). Study of occupational stress between government school teachers and private school teachers. *International Journal of Educational Research*.
- Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Wellbeing: Americans Perception of Life Quality*. New York, Plenum.
- Ahmed, A., & Ansari, S. A. (1998). Organizational commitment among flour mill workers: A Comparative Study of the owner and blue-collar workers. *Journal of Community Guidance and Research, 15*, 253-260.
- Allred, K. D., & Smith, T. W. (1989). The hardy Personality: Cognitive and Physiological responses to evaluate threat. *Journal of Personality and Social Psychology, 56*, 257-266.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328. doi:10.1108/02683940710733115.
- Basu, S. (2009). Job satisfaction of secondary school teachers. *Indian Journal of Psychometrics and Education, 40* (1/2). P. 168-171.

- Bhatt, D. J. (1987). Personality determinants of job satisfaction of college teachers in the Saurashtra region of Gujarat State: A Psychological Study. *Indian Dissertation Abstracts*, 16(5), 21-34.
- Bishop, M., & Slevin, B. (2004). Teacher's attitudes toward students with Epilepsy: the result of a survey of elementary and middle school teachers. *Epilepsy & Behavior*, 5(3), 308-315.
- Borg, M. G., & Riding, R. J. (1991). Occupational stress and satisfaction in teaching. *British Journal of Educational Psychology*, 61(1), 69-81
- Chand, R. (2005). *Work Motivation and job satisfaction of physical Education Teachers in High Schools of Himachal Pradesh concerning existing sports facilities*. Unpublished thesis of Education, Himachal Pradesh University, Shimla.
- Cheng, Y. W., & Ren, L. (2010). Elementary resource room teacher's job stress and job satisfaction in Taiyuan country, Taiwan. *Journal intellect Dev Disable*, 35(1), 44-98.
- Crossman, A., & Harris, P. (2006). Job satisfaction of secondary school teachers. *Educational Management Administration & Leadership*, 34(1), 29-46.
- Davis, M., Stankov, L., and Roberts, R. D. (1998). Emotional intelligence: In Search of an elusive Construct. *Journal of Personality and Social Psychology*, 75, 989-1015.
- Dewey, J. (1916). *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan.
- Dinham, S., & Scott, C. (2000). Moving into the third, outer domain of teacher satisfaction. *Journal of Educational Administration*, 38(4), 379-396. doi:10.1108/09578230010373633.
- Fimian, M.J. (1986). *Note on Reliability of the Teacher Stress Inventory*. Psychological Reports, 275-278.
- Ismail, M., Zaman, Q., Neelam, D. W., Shah, S. H., Wazir, S., Karam, Khan, G., & Rehman, A. (2005). Private schools teachers' satisfaction: a case study of district Dir lower tehsil Talash KPK Pakistan.
- Kamboj, R. K. (2008). Relationship of job satisfaction with self-actualization. *Recent Researches in Education and Psychology*, 13, 1-2.
- Khan, M., Arif, T., Iftikhar, M., & Manzoor, M. (2021). The effect of job stress on job satisfaction among physical education teachers in government colleges in Khyber Pakhtunkhwa, Pakistan. *Sarhad University Journal of Management Sciences*. Retrieved from journal.suit.edu.pk
- Khan, R. (2020). A study of job satisfaction and job stress among physical education teachers working in government, semi-government, and private schools. *Journal of Education and Development Studies*.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756. doi:10.1037/a0019237.
- Kumar, P., & Andmutha, D. N. (1975). *Manual of job satisfaction questionnaire for secondary school teachers (JSQ)*. Agra: Psychological Research cell. Rao, G. D. (1997). Attitude, values, and perceptions. (New Delhi: Kanisha Publications), 40-82.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35.
- Mishra, P., & Pandey, P. (2014). A comparative study of job satisfaction of physical education teachers between government and private schools. *Journal of Physical Education and Sport Sciences*.

- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 38-54
- Rao, D. B., & Sridhar, D. (2003). *Job-satisfaction of school teachers*. Discovery Publishing House, New Delhi. Srivastava, D., Holani, U. and Bajpai, N. (2005). Job satisfaction in the public sector. *Indian Management*, 44, 62-65.
- Richards, K. A. R., Gaudreault, K. L., & Woods, A. M. (2018). Understanding physical education teacher motivation and job satisfaction: The case for self-determination theory. *Quest*, 70(4), 438-456.
- Sharma, P., & Jyoti, J. (2009). Job satisfaction among university teachers: An empirical study. *Journal of Services Research*, 9(2), 51-80.
- Skaalvik, E. M., & Skaalvik, S. (2017). Motivated for teaching? Associations with school goal structure, teacher self-efficacy, job satisfaction, and emotional exhaustion. *Teaching and Teacher Education*, 67, 152-160. doi:10.1016/j.tate.2017.06.006.
- Taris, T. W., Schreurs, P. J., & Van Iersel-Van Silfhout, I. J. (2001). Job stress, job strain, and psychological well-being among Dutch university staff: Towards a dual process model for the effects of occupational stress. *Work & Stress*, 15(4), 283-296.
- Travers, C. J., & Cooper, C. L. (1996). *Teachers under pressure: Stress in the teaching profession*. Routledge
- Vroom, V. H. (1964). *Work and Motivation*. New York: Wiley.
- Watson, D. and Walker, L. M. (1996). The long-term stability and predictive validity of trait measure of affect. *Journal of Personality and Social Psychology*, 70, 567-577.
- Watten, R. G., Vassened, D., Myhrer, T., and Syversen, J. L. (1997). Personality factors and Somatic symptoms. *European Journal of Personality*, 11, 57-68.