

Teacher's Mental Health: A Descriptive Study of Subject Specialist Teachers at Higher Secondary Level in Khyber Pakhtunkhwa, Pakistan

Rashid MEHMOOD¹ Hafiz Muhammad INAMULLAH² Mehmet ÇERÇİKAYA³

Cited:

Medmood, R., Inamullah, H, M. & Çerçikaya, M. (2022). Teacher's mental health: a descriptive study of subject specialist teachers at higher secondary level in Khyber Pakhtunkhwa, Pakistan. *Journal of Interdisciplinary Educational Research*, 6(13), 292-304, DOI: 10.57135/jier.1127735

Abstract

Teachers are considered the backbone of any educational system. They are expected to perform effectively with sound mental health. However, it is observed that teachers are the victim of many mental and physical problems irrespective of the reasons that could be inside or outside the school (Goel, 2015). Therefore, the current study will help school teachers, principals and parents to realize the importance of mental health and to facilitate teachers by providing mental health counselling for wellbeing of community. In this regard, to explore mental health of teachers, descriptive research was conducted to investigate the mental health of male and female subject specialist teachers at Higher Secondary School level. A sample of 141 subject specialists, both male (79) and female (62), were selected from 35 Higher Secondary Schools of district Peshawar through proportionate (50%) stratified random sampling technique. A standardized Mental health checklist was adopted for the collection of data. The findings of the study revealed that both male and female teachers rarely suffer from mental problems and physical problems. Also, both the groups possessed better mental health. However, there is no significant difference between mental health of male and female teachers. Further exploration of the results and recommendations are discussed.

Keywords: Mental health, somatic problems, mental problems, physical problems, Higher Secondary School teachers, Khyber Pakhtunkhwa, Pakistan

INTRODUCTION

Teaching is the main activity that assists in the attainment of educational objectives. Effective teaching leads to the successful achievement of school goals. Whereas, effective teaching depends on different factors that make a teacher effective. These factors could be personality, teaching method, job satisfaction, mental health, gender, locale, etc. The cultural, social, and mental conditions of teachers should be given priority and importance (Jessiman, P., Kidger, J., Spencer, L. *et al.*, 1996).

Mental health is a guide that displays the person's ability to meet the social, emotional, or physical demands of the environment (Kumar, 1992). As stated by a Surgeon General's report (1999), that Mental health is the proper function of the mind that results in productive activities, social bonding, and skills to cope with difficulties. However, mental health is an essential part of a person's life. Furthermore, It is necessary to personal and social relationships and welfare of the family that

¹ Rashid Mehmood, PhD Scholar, Institute of Education & Research, University of Peshawar, rminhas969@uop.edu.pk, orcid.org/0000-0003-2638-0198

² Prof. Dr. Muhammad Inamullah, Institute of Education & Research, University of Peshawar, hafiznam@uop.edu.pk, orcid.org/0000-0003-0925-9812

³ Mehmet Çerçikaya, PhD Scholar, Institute of Education & Research, University of Peshawar, mcercikaya31@gmail.com, orcid.org/0000-0002-9070-5092

contributes to society. Mental health plays the role of catalyst for learning, emotional growth, flexibility, self-esteem, and communication skills.

As stated by World Health Organization (2004) that the state of satisfaction in which a person can work productively and passionately, cope with normal stress, and contribute to his or her community and society is known as mental health. According to Taylor and Brown, (1988); WHO, (1948); the American Heritage Dictionary, (2006); Nathawat, (1997), a condition of complete mental, physical and social well-being is known as mental health. The social, mental, and physical stability of an individual to adjust to his/her environment refers to the mental health of that person. Thus, in the educational environment mental health of a teacher contributes to effective teaching. It plays a vital role to achieve desired objectives in teaching. Also, it carries out the quality teaching-learning process in general and student's holistic development in particular. Mental imbalances like tensions, frustrations, anxiety, etc. are the foremost barriers in the way of achievements among students and teachers (Goel, 2015). Thus, mental health contributes to the teacher effectiveness that adjusts the teacher according to his environment (Silver, 1999; Brooks and Shaffer, 1951; Dhingra, 1966; Hilgard, 1957).

Literature Review

Mental health of teachers has been studied on gender groups like male and female, and population group from urban to rural. Some pertinent research studies are reviewed and reported below:

In 2001, Choudhary, investigated the relationship of teacher burnout with mental health problems, occupational stress, and socio-economic status. The results of the study showed that mental health problems, occupational stress, teaching experience, educational qualification, marital status, and location were having an interactive influence on teacher burnout. While, Kumar (2003) examined the personality traits of workers, teachers and administrators, and mental health and its relationship. Results of the study showed that correlation between the mental health of male teachers was found positive with factors hesitant/social, emotional/stable, worldly/spiritual, and traditional/ modern. While the negative correlation of mental health was found with the factor of trust/ doubt. Whereas, mental health and other factors of the male teacher had no significant difference. The factors; family and social conditions, had been found positively correlated with the mental health of female teachers. While the correlation of mental health had been found negative with the factor self-confident/anxious. Whereas, other factors had no significant difference with the mental health of female teachers.

The relationship between the mental health of secondary school teachers with marital status, sex, level of education, and experience in teaching and the comparison between mental health and self-concept, adjustment and mental health, and adjustment and self-concept investigated by Nibedita (2005) revealed that male, more qualified, married, less experienced teachers had no better self-concept than female, less qualified, unmarried, and more experienced teachers. There was no significant difference in respect to mental health among married and unmarried teachers. Self-concept was found influencing due to the adjustment and mental health of secondary school teachers both individually and combined. The results of the study, of Singh and Girish (2006) on anxiety, social dysfunction, work-family conflict, depression, psychosocial stress, and physical symptoms, reported that the female teachers were normal and usual but the majority of the teachers were suffering from their developing psychological stress which may directly have effects on their mental health. While, Nagai et al. (2007) in their study about the association of poor mental health with job dissatisfaction in Japan. The results of the study reported that female teachers of Japan had poor mental health was associated with job satisfaction.

Another study by Khan and Beena (2008) investigated the influence of mental health of teachers on their level of burnout. The results of the study revealed that low mental health teachers easily

burnout than high and average mental health teachers. The inventory observed the variation in the mean score of burnout in poor, average, and good mental health which was 50.4, 79.23, and 97.9 respectively. The study by Ravichandran and Rajendran (2008) reported the teachers' source of stress at Higher Secondary School. The findings of the study showed that teachers realized that the personal variables have a noteworthy role in confronting stress due to various sources, associated with the teaching profession.

Srivastava and Asthana (2008) investigated the relationship between the mental health of teachers and lecturers. Also made a comparison of mental health with social support. The result of the study revealed that lectures had good mental health as compared to teachers. Also, high socially supported females had better mental health. Gholamitooranposhti (2012) investigated mental health of two groups i.e. retarded and normal students' teachers. The results of the study declared that these two groups of teachers have different 'loneliness' on the scale. The prominent difference between normal and retarded student-teacher in their loneliness scale was that a teacher does not feel being cared. Due to no students' feedback, retarded students' teachers feel more lonely than the normal one. The significant difference between the normal student-teacher and the retarded student-teacher was found only on the fatigue scale. Mean of anxiety, hopelessness, restlessness, nervousness and anger sleep disorder, indigestion, headache, and heart burnout were not significantly different.

Pachaiyappan & Dushalaya (2014) studied the mental health of teachers at secondary and higher secondary levels. The results declared that teachers at secondary level had low mental health than teachers at higher secondary school level. Based on gender-wise analysis, female teachers had a higher level of mental health than male teachers. While, Droogenbroeck & Spruyt (2015) reviewed the empirical studies published after 1980 on the mental health of teachers. In their study, it came to the light that mental health was mainly concerned with three aspects i.e. burnout, psychological distress, and psychiatric disorder like depression and anxiety, etc. This study displayed that the idea about teachers that they experience more mental health problems are at risk of well-known epidemiological data. The data also showed that the lower socio-economical classes and less-educated teachers will be at risk of suffering from mental health problems than middle classes. While comparing teachers with other human service occupations, it was found that teachers did not suffer the psychological disorder, anxiety, depression, and sleeping disorder as did by others.

Gorsy, Panwar, & Kumar (2015) in their study examined the personal mental health of teachers at public sector schools. Gender-wise, male teachers had better mental health as compared to female teachers. While areas-wise, urban area teachers had higher level of mental health as compared to rural area. The study also revealed that the personal and professional demands responsible for level of mental health of teachers. Cezar-Vaz et al. (2015) examined the self-observed stressful working condition of Elementary School teachers and the biopsychological results of those working conditions that promote well-being for teachers in the workplace. Results of the study revealed that the effect of the stressful working conditions was associated with incompetent salary, extravagant number of activities, and having to work at home. Bio psychological results include sleep disorder, anxiety, and stress. There was a deep statistical relation between limited salary, extravagant activities, anxiety, and stress. Also, teachers communicated that encouraging well-being in a workplace can be done through creating good relationships among colleagues in a working condition. While, Sebastian (2016) examined the psychological traits of the mental health of teachers. Results showed that most of the teachers had depression, low anxiety, high general positive effects, high life satisfaction, and low loss of emotional control. Teacher enjoyed good mental health which had been measured high on positive and low on negative state of mental health.

Yanga, You, Zhang, Lian, & Feng (2019) reviewed 116 studies through cross-temporal meta-analysis. The study examined the mental health status of Chinese teachers between 1998 and 2013. The results of the study showed disintegration especially in psychoticism and hospitality dimensions in Chinese teachers' mental health from 1998 to 2013. In developed as well as in developing nations the level of stress and psychological distress is increasing with time. This study also showed that teachers with poor mental health status may suffer from occupational stress such as excessively centralized control in teaching, too many non-teaching tasks, low socioeconomic status, overemphasis on competitions and frequently changing regulatory framework. Harding et al. (2019) reviewed the relation between teachers' and students' mental health and their wellbeing. Results of the study reported that the teachers' wellbeing was connected with the psychological distress of lower students and better students' wellbeing. Teachers' performance and teacher-student relationships made a channel of their relationship. The level of the teacher's depressive symptoms was dependent upon the poorer students' psychological distress and wellbeing.

Objectives of the Study

Following are the objectives of the study:

1. To find mental health of male and female teachers at higher secondary school level.
2. To compare mental health between male and female teachers at higher secondary school level.

Hypotheses of the Study:

Following are the hypotheses of the study:

H_0 1= There is no significant difference between male and female teachers with respect to mental health at higher secondary school level.

H_a = There is a significant difference between male and female teachers with respect to mental health at higher secondary school level.

Rationale of The Study

Our country, Pakistan, is passing through an educational crisis since its independence. It is observed that currently, in schools, teacher effectiveness is a serious issue. Due to changing socioeconomic conditions, a drastic change has been observed in the values of teachers and their professional concern with jobs, which adversely affects their mental health. The researcher, being a teacher, has observed in education circles that teachers suffer from many social, emotional, and physical problems. Whatever the reasons may be, teachers are expected to be effective in their field with good mental health. It is also observed that the health of teachers, on social, physical, and mental health domains adds efficiency not only to their professional growth and development but also to their personality. Looking at the importance of mental health, and to answer the questions like; What is mental health, what is the level of mental health of teachers in District Peshawar, Pakistan and what is the difference among male and female teachers in respect to the level of mental health, such study is conducted.

Delimitation of the Study

Keeping in view the nature of the population, the current study was delimited to male and female subject specialist teachers at Government Higher Secondary Schools in district Peshawar, Khyber Pakhtunkhwa, Pakistan. Furthermore, due to COVID-19, the data was collected through an online questionnaire instead of visiting personally to the schools.

Research Methodology

The study being purely qualitative in nature utilizes descriptive research design. The descriptive research describes the phenomenon the way it is (Adams et al., 2007).

Population:

The population of the study was comprised of all the subject specialist teachers, both male and female, of Government Higher Secondary Schools of District Peshawar. According to EMIS (2015-16), there were 35 higher secondary schools in district Peshawar. Among which there were 21 boys' schools while 14 girls schools. The number of male subject specialists were 158 while female subject specialists were 124 with total of 282 both male and female subject specialist teachers. Table 7.1. depict the population of the study.

Table 7.1. Population of the study (EMIS, 2015-16)

School Teachers	Male	Female	Total
Higher Secondary Schools in District Peshawar	21	14	35
Subject Specialist Teachers	158	124	282

Sampling and sample size:

For sample of the study proportionate stratified random sampling technique was used. Proportionate sampling is a sampling method in which a limited population (strata) is divided into subpopulations (stratum) and then the sample is selected from each subpopulation with the help of a random sampling technique to represent equal proportion in target population (Salkind, 2010). Therefore, through proportionate stratified randomly technique 50% proportion was selected randomly from both subpopulations, i.e. male and female subject specialist teachers, for equal representation as shown in table 7.2. From the population of 158 male subject specialists and 124 female subject specialists 50% respondents were selected which is 79 male and 62 female subject specialist teachers with a total of 141 teachers.

Table 7.2. Proportionate Sampling Process

School Teachers	Total Male Teachers	Sample of Male Teachers	Total Female Teachers	Sample of Female Teachers
Subject Specialist Teachers	158	50% of 158= 79	124	50% of 124= 62

After the proportionate sampling process the total number of sample, separately male (79) and female (62), was divided on total schools (21 male and 14 female) and data was collected randomly from fixed number of participants from each school. Below is the table which depict the entire sample distribution.

Table 7.2. *Sample size for the study*

School Teachers	Male	Female	Total
Subject Specialist Teachers	79	62	141
Higher Secondary Schools in District Peshawar	21	14	35
No. of Subject Specialist Teachers from each school	4	5	9

RESEARCH INSTRUMENT

A standardized mental health checklist developed by Kumar in 1992 was adopted for the collection of data. Mental Health Checklist measured the pre-illness mental conditions of teachers. The study of Kumar (1992), about Mental Health, was based on two main areas i.e. Mental and Somatic (physical) Problems.

Table 7.3. Dimensions of Mental Health Checklist

Dimensions	Total No of Items
Section A: Mental Problems	5
Section B: Physical Problems	6

Pilot Study

Literature has suggested that it is enough to have 10% of sample for the pilot study (Connelly, 2008). So, a pilot study was performed on 10 male subject specialist teachers and 7 female subject specialists, which is 10% of the sample. The respondents for the pilot study were not included in the original sample of the study.

Validity & Reliability

The research instrument was open access. So, the tool was adopted for the purpose of data collection. The reliability of research instrument was determined through Cronbach’s Alpha with the help of the Statistical Package for Social Sciences (SPSS V. 20.0). The value of reliability was **0.856** (see table 6.3.2.). Thus, it is noted by George and Mallery (2003) that reliability is excellent if its value is 0.80. However, there is no fixed value of alpha for acceptance (Gliem and Gliem, 2003; George and Mallery, 2003; and Robson, 2002) Therefore, the instrument was reliable (*Annexure D*).

Table 7.3.2. Reliability Of Mental Health Checklist

Instrument	Gender	N	No of items	Cronbach's Alpha
Mental Health Checklist	Male	10	11	0.856
	Female	7		

Administration

Mental Health Checklist had three portions. The first portion comprised the demographic data of the participants. Further, two portions were named as 'Section A' and 'Section B' comprised of 6 and 5 items, respectively with 'Rarely', 'At times', 'Often', and 'Always' as options. The participants were directed to tick mark one of the options that best suited them.

Scoring

There were two main sections for scoring i.e., 'Section A' and 'Section B'. Each statement in both the sections had four answers i.e. 'Rarely', 'At times', 'Often', and 'Always' with the numeric value of 1, 2, 3 and 4 respectively. The checklist showed highest to lowest mental health status with total score varied from 11 to 44.

RESULTS and FINDINGS

Mental health of the teachers was calculated with the help of standardized tool. The data obtained from the standardized tool was analyzed through SPSS 20.0. Below are the results obtained after analysis of data.

Table 8.1. Theme wise Mental Health of male & female teachers

Variable	Sections	Gender	N	Mean	SD
Mental Health	Section A: Mental Problems	Male	79	1.97	0.16
		Female	62	1.98	0.21
	Section B: Physical Problems	Male	79	1.88	0.16
		Female	62	1.89	0.36

Table 8.1 describes the mean and standard deviation of both sections, i.e., Section A: Mental Problems & Section B: Physical Problems, of Mental Health Checklist. Results display that, in Section A: Mental Problems, the mean for male teachers was 1.97 (SD= 0.16) and mean for female teachers was 1.98 (SD= 0.21). The figures depict that both male as well as female teachers rarely have mental problems.

Finding No 1:

Through Mental Health Checklist, in terms of "Mental Problems" the mean value for male and female teachers was **1.97** (SD= 0.16) and **1.98** (SD= 0.21) respectively. Results showed that both male and female teachers rarely suffer from mental problems.

Results for Section B: Physical Problems display that the mean for male teachers was 1.88 (SD= 0.16) and mean for female teachers was 1.89 (SD= 0.36). The figures show that both male and female teachers rarely suffer from physical problems.

Finding No 2:

Through Mental Health Checklist, in terms of “Physical Problems” the mean value for male and female teachers was **1.88** (SD= 0.16) and **1.89** (SD= 0.36) respectively. Results showed that both male and female teachers rarely suffer from physical problems.

Table 8.2. Overall Mental health of male and female teachers

Variable	Gender	N	Mean	SD
Mental Health	Male	79	2.9437	0.50425
	Female	62	2.9604	0.52278

Table 8.2. provides the descriptive statistics of the overall mental health of male and female teachers. In the above table the respective mean for male (n=79) and female (n=62) was 2.94 (SD=0.50) and 2.96 (SD=0.52). Results of the mean show that both male and female teachers suffer from mental health problems but not highly.

Finding No 3:

The mean score for the Mental Health of male teachers was **2.94** (SD= 0.50) and for female teachers, the mean was **2.96** (SD= 0.52). Results of the mean score showed that both male and female teachers suffer from mental health problems in low degrees (out of the two degrees of “high” and “low” on standardized scale).

H₀₁= There is no significant difference between male and female teachers with respect to mental health at higher secondary school level.

Table 8.3. Comparing Mental Health of male and female teachers

Gender	N	Mean	SD	t	p-value
Male	79	20.7595	5.81822	-0.757	0.450
Female	62	21.5000	5.69656		

Table 8.3 indicates that gender-wise, the number of male and female participants were 79 and 62 respectively. An independent sample t-test was used to compare the mean score of the mental health of male and female participants. There was a no significant difference in mental health of male (M=20.75, SD=5.81) and female (M=21.50, SD=5.69); t(140)=-0.757, p=0.450. These results shows that the mental health of female teachers has no relationship with the mental health of male teachers.

Finding No 4:

On Mental Health, the mean of male teachers was ($M=20.75$, $SD=5.81$) and female teachers were ($M=21.50$, $SD=5.69$); $t(140)=-0.757$, $p=0.450$, which shows that there was no significant difference found between male and female teachers in terms of mental health. Which further reveals that the mental health of male teachers is significantly related to the mental health of female teachers.

DISCUSSION

The study also revealed that male as well as female teachers rarely suffer from mental problems. The study of Bedi and Sehgal (2012), and Cezar-Vaz, Bonow, Almeida, Rocha, & Borges (2015) supported the finding of the current study. The results of their study indicated that male as well as female college teachers have mental symptoms. Whereas the study of Bauer et al. (2007), Dagar, N., & Mathur, M. (2016), Zhang, Deng, and Li (2006), Lei (2007), and Nagai, Tsuchiya, Touloupoulou, and Takei (2007) pinpointed that psychological problems are more serious among female teachers than male teachers. Thus, it indicates that both male and female teachers suffer more from mental problems. The researcher believes that the reason behind this finding might be that male and female teachers are expected to be sympathetic, careful, sincere, patient, and supportive both in school and at home. Therefore, male and female teachers are under great pressure which leads to mental illness.

The finding of the study revealed that both male and female teachers rarely suffer from physical problems. The study of Castro, Carbonell, & Anestis, (2012), Khan, Khan, Harezlak, Tu, & Kroenke, (2003), and Khan et al. (2003) reported the same result. Their study concluded that gender-wise there no difference in somatic problems. However, the study of Khan, Khan, Harezlak, Tu, & Kroenke, (2003) revealed that it could be the chance, regarding female teachers, to report more physical problems as compared to male teachers. Furthermore, the study of Dessotte, Silva, Furuya, Ciol, Hoffman, & Dantas (2015), White, (2013), and Aragona, Monteduro, Colosimo, Maisano, & Geraci, (2008) produced different results. They found in their study that female teachers are more inclined towards reporting somatic problems than male teachers. The researcher believes that male and female teachers are hardworking. Moreover, their profession is one of the tough professions because a teacher deals with different minds at a time. Therefore, it might be the reason that both male and female teachers suffer from physical problems.

Interestingly, one of the results of the study showed that both male and female teachers suffer from mental health problems but not very high. The study of Singh and Singh (2006), Nagai et al. (2007), Gorsy, Panwar, & Kumar (2015), Srivastava and Asthana (2008), and Pachaiyappan & Dushalaya (2014) pinpointed that in comparison to female teachers, male teachers have better mental health. However, the study of Srivastava and Asthana (2008), and Pachaiyappan & Dushalaya (2014) revealed that mental health of female teachers is high than male teachers. Being a researcher, it is believed that the teaching profession is one of the hardest professions. Teachers are like a programmer. Teacher programs the concepts and the knowledge in the brain of students all the time. So, it is a challenging task to educate students keeping in view the individual differences. Therefore, it would be the reason that male and female teachers suffer from mental health problems.

The results of the study displayed that there is no significant difference among the mental health status of male and female teachers, which means that the mental health of male teachers is significantly related to the mental health of female teachers. The findings of Nagai et al. (2007), Gorsy, Panwar, & Kumar (2015), Singh and Girish (2006), Antonious et. al (2013), Abkhoul and Jenaabadi (2015), Srivastava and Asthana (2008), Pachaiyappan (2012), and Mundia (2013) do not support the findings of the current study. Nagai et al. (2007), Gorsy, Panwar, & Kumar (2015), Singh

and Girish (2006), and Mundia (2013) stated that male student teachers were significantly different from female teachers. Whereas Srivastava and Asthana (2008) and Pachaiyappan (2012) revealed that, as compared to male teachers, female teachers have a high level of mental health. The researcher believes that male and female teachers have the same profession, they deal with same students but with different strategies and have same workload. Therefore, male and female teachers have no differences in mental health.

CONCLUSION:

In the light of the findings of the current research study, following conclusion was drawn: Results from the mental health checklist showed that both male and female teachers rarely suffer from mental problems and physical problems. Also, both the groups possessed better mental health. However, there is no significant difference between mental health of male and female teachers.

RECOMMENDATIONS

1. The findings of the study showed that teachers were suffering from mental health problems though in lower degrees. Therefore, principal may develop programs that facilitate the identification, prevention, and treatment of mental health among teachers. Teachers may be provided with facilities like free consultancy, financial aids, etc.
2. A Mental Health desk for teachers may be established in every school to prevent from mental health problems. A mental health checklist for teachers may be developed to examine their mental health after a fixed interval of time.
3. The findings of the study showed the importance of mental health for teachers. Therefore, it is suggested that teachers should establish good sleeping habits, buildup emotional resilience, take a break from workload, eat well, and take care of physical health.

REFERENCES

- Abkhoul, T. and Jenaabadi (2015). Comparative analysis of the relationship between job burnout and general health of male and female high school teachers in Zabol. *Natural Science*, 7, 391-399.
- Adams, J., Khan, H. T., Raeside, R., & White, D. I. (2007). *Research methods for graduate business and social science students*. India: SAGE Publications.
- American Heritage English Dictionary (4th ed.) (2006). America: Houghton Mifflin Company.
- Antoniou, A. S., Ploumpi, A. and Ntalla, M. (2013). Occupational stress and professional burnout in teachers of primary and secondary education: the role of coping strategies. *Psychology*, 4, 349-355.
- Antonious, A. S., Ploumpi, A. and Ntalla, M. (2013). Occupational stress and professional burnout in teachers of primary and secondary education: the role of coping strategies. *Psychology*, 4, 349-355.
- Aragona, M., Monteduro, M. D., Colosimo, F., Maisano, B., & Geraci, S. (2008). Effect of gender and marital status on somatization symptoms of immigrants from various ethnic groups attending a primary care service. *German J Psychiatry*, 11(2), 64-72.
- Bauer, J., Unterbrink, T., Hack, A., Pfeifer, R., Buhl-Grießhaber, V., Müller, U. (2007). Working conditions, adverse events and mental health problems in a sample of 949 German teachers. *International Archives of Occupational Environmental Health*, 80, 442-449.
- Bedi S. and Sehgal, M. (2012). "Gender differences on occupational stress, ways of coping and anxiety among college teachers," *Indian Journal of Psychological Science*, 3(1), pp. 153-164.
- Brooks, F. D. & Shaffer, L. F. (1951). *Child psychology*, London: Methuen and Co. Ltd.
- Brophy, J. (1985). *Interactions of male and female students with male and female teachers*. In L.C. Wilkinson & C.B. Marrett (Eds), *Gender influences in classroom interaction*. New York: Academic Press. (pp. 115-142)
- Castro, Y., Carbonell, J., & Anestis, J. (2012). The influence of gender role on the prediction of antisocial behaviour and somatization. *International Journal of Social Psychiatry*, 58(4), 409-416. <https://doi.org/10.1177/0020764011406807>
- Castro, Y., Carbonell, J., & Anestis, J. (2012). The influence of gender role on the prediction of antisocial behaviour and somatization. *International Journal of Social Psychiatry*, 58(4), 409-416. <https://doi.org/10.1177/0020764011406807>
- Cezar-Vaz, M. R., Bonow, C. A., Almeida, M. C., Rocha, L. P., & Borges, A. M. (2015). Mental Health of Elementary Schoolteachers in Southern Brazil: Working Conditions and Health Consequences. *The Scientific World Journal*, 2015, 1-6. doi:10.1155/2015/825925
- Choudhary, R. (2001) Teacher Burn-out in relation to Occupational Stress, Mental Health Problems and Socio-economic Status- a factor analytical study. Kurukshetra University, Kurukshetra.
- Connelly, L. M. (2008). Pilot studies. *Medsurg Nursing*, 17(6), 411-2.
- Dagar, N., & Mathur, M. (2016). Mental Health of School Teachers in relation to their Sex and type of School. *International Journal of Educational Planning & Administration*, 6(1), 49-53.
- Dessotte, C. A. M., Silva, F. S., Furuya, R. K., Ciol, M. A., Hoffman, J. M., & Dantas, R. A. S. (2015). Somatic and cognitive-affective depressive symptoms among patients with heart disease: differences by sex and age. *Revista Latino-Americana de Enfermagem*, 23(2), 208-215.
- Dhingra, R. (1966). *Educational psychology and guidance*. Jalandhar: Punjab Kitab Ghar.
- Droogenbroeck, F. V., & Spruyt, B. V. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education*, 51, pp. 88-100.
- EMIS-KP (2015-16). Retrieved from: <https://www.kpese.gov.pk/Downloads/ASC/ASC%202015-16.pdf>
- Erden, A., Aytac, T., & Erden, H. (2016). Gender effect on classroom management skills and competencies of teachers: A meta-analysis study. *International Journal of Human Sciences*, 13(1), 1543-1557. doi:10.14687/ijhs.v13i1.3607
- George, D., and Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Gholamitooranposhti, M. (2012). Teachers' Mental health. *Procedia - Social and Behavioural Sciences*, 69, 1295-1301.
- Gliem, R. & Gliem, J. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.

- Goel, S. (2015). *Teacher effectiveness in relation to job satisfaction, personality and mental health*. New Delhi, India: A.P.H Publishing Corporation.
- Good, T. L., Sikes, J. N., and Brophy, J. E. (1973). Effects of teacher sex and student sex on classroom interaction. *Journal of Educational Psychology*, 65(1), 74-87.
- Gorsy, C., Panwar, N., & Sandeep K., (2015). Mental Health among Government School Teachers. *The International Journal of Indian Psychology*, 3, pp. 117-124.
- Gorsy, C., Panwar, N., & Sandeep K., (2015). Mental Health among Government School Teachers. *The International Journal of Indian Psychology*, 3, pp. 117-124.
- Gorsy, C., Panwar, N., & Sandeep K., (2015). Mental Health among Government School Teachers. *The International Journal of Indian Psychology*, 3, pp. 117-124.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., ... Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders*, 242, 180-187. doi: 10.1016/j.jad.2018.08.080
- Hilgard, E. R. (1957). *The Human dimension in teaching*. College and University Bulletin, Teaching. Boston: Houghton Mifflin, 17, 1-3.
- International Commission on Education. (1996). *Treasure within report to U N E S C O of the International commission on education for the twenty first century U.N.* Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000109590>
- Jessiman, P., Kidger, J., Spencer, L. et al., (2022). School culture and student mental health: a qualitative study in UK secondary schools. *BMC Public Health*. 22, 619. <https://doi.org/10.1186/s12889-022-13034-x>
- Jones, K. A., Jones, J. L., & Vermette, P. J. (2011). Six common lesson planning pitfalls: Recommendations for novice educators. *Education*, 131(4), 845-864.
- Khan, A. A., Khan, A., Harezlak, J., Tu, W., & Kroenke, K. (2003). Somatic symptoms in primary care: Etiology and outcome. *Psychosomatics*, 44(6), 471-478.
- Khan, S., and Beena, S. (2008). Teacher Burnout in Relation to Mental Health. *Edutracks*, 7(9).
- Kothari, C. R. (2004). *Research methodology. Methods and techniques* (2nd Revised Ed). New Delhi. New Age International Publishers.
- Kumar, P. (1992). *Mental health check list (MHC)*. Agra: National Psychological Corporation.
- Kumar, S. (2003). *A Psycho-Social Study of Mental Health of Teachers Administrators and Employees*. Allahabad University, Allahabad.
- Lei, W. (2007). Mental health of college teachers and its relationship with achievement motive. *Journal of Clinical Rehabilitative Tissue Engineering Research*, 11(39), 7834-7837.
- Mundia, L. (2013). Relationship Between Mental Health and Teaching. *International Journal of Mental Health*, 42(2-3), 73-98. doi: 10.2753/imh0020-7411420205
- Nagai M., Tsuchiya K. J., Touloupoulou T., Takei, N. (2007). Poor mental health associated with job dissatisfaction among school teachers in Japan. *Journal of Occupational Health*, 49(6), 515-522.
- Nathawat, S. S. (1997). Value based quality of life. *Indian Journal of Clinical Psychology*, 24, 101-102.
- Nibedita, N. (2005). *Mental Health and Adjustment of Secondary School Teachers Influencing Development of Self Concept in Teachers*. Utkal University, Bhubaneshwar.
- Pachaiyappan, P., & Dushalaya, R. (2012). Mental Health of Secondary and Higher Secondary School Teachers - An Analysis. *International Journal of Scientific Research*, 3(2), 117-119. doi: 10.15373/22778179/feb2014/37
- Pachaiyappan, P., & Dushalaya, R. (2014). Mental Health of Secondary and Higher Secondary School Teachers - An Analysis. *International Journal of Scientific Research*, 3(2), 117-119. doi: 10.15373/22778179/feb2014/37
- Raja, B., William, D., and Thiagarajan, A. P. (1998). *Teacher-Effectiveness and School Organizational Climate of Boys' Higher Secondary Schools in Tuticorin. Sixth Survey of Educational Research 1993-2000*. National Council of Educational Research and Training, New Delhi.
- Ravichandran, R., and Rajendran, R. (2008). *Perceived Sources of Stress among the Teachers*. National Institute of Technical Teachers' Training and Research, Chennai
- Robson, C. (2002). *Real world research*. 2nd edition. Blackwell Publishing, Malden
- Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412961288

- Sebastian, V. (2016). TEACHER'S MENTAL HEALTH –IMPLICATIONS FOR TEACHING-LEARNING. *Scholarly Research Journal for Humanity Science & English Language*, 4(23), 6181–6187. doi: <https://doi.org/10.21922/srjhsel.v4i23.9709>
- Silver, M. (1999). *Picture stories and mental health. Cultural adjustment mental health and ESL: the refugee experience the role of the teacher and ESL activities*". Denver, Co: Spring Institute for International Studies.
- Singh, M., and Girish, S. (2006). Assessment of Mental Health Status of Middle-Aged Female School Teachers of Varanasi City. *The Internet Journal of Health*. 5(1).
- Singh, M., and Girish, S. (2006). Assessment of Mental Health Status of Middle-Aged Female School Teachers of Varanasi City. *The Internet Journal of Health*. 5(1).
- Srivastava, S., and Asthana, M. (2008). Social Support and Mental Health: A Study of Working Women. *Psycho-lingua*, 38(1), 97-100.
- Srivastava, S., and Asthana, M. (2008). Social Support and Mental Health: A Study of Working Women. *Psycho-lingua*, 38(1), 97-100.
- Surgeon General's Report (1999). *Mental health: A report of the Surgeon General*. Rockville, Md: Dept. of Health and Human Services, U.S. Public Health Service.
- Taylor, S. E., and Brown, J. D. (1988). Illusion and Wellbeing: A Social Psychological Prospective on Mental Health. *Psychological Bulletin*, 103, 193-210.
- White, P. D. (2013). Functional somatic syndromes may be either "polysyndromic" or "monosyndromic". *Journal of Psychosomatic Research*, 74, 2–3.
- World Health Organization (2004). *Prevention of mental disorders: Effective interventions and policy options*. A report of the WHO Geneva and the prevention research center, Universities of Nijmegen and Maastricht: World Health Organization.
- Yang, J. Y., Lu, H. Y., Zhao, S. Y., (2012). Correlation between the teaching efficacy and mental health of middle school teachers. *Educ. Res. Exp.*, (1), pp. 20–24.
- Yanga, R., Youb, X., Zhangb, Y., Lianc L., Feng, W. (2019). Teachers' mental health becoming worse: The case of China. *International Journal of Educational Development*, 70. Retrieved from: <https://doi.org/10.1016/j.ijedudev.2019.102077>
- Zhang Y., Deng, X., Li, W. (2006). Investigation of mental health state of junior high school teachers in underdevelopment area in country. *China Journal of Health Psychology*, 14(1), 83–85.