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Original Research

Level of Occupational Stress among Primary School Teachers in Nekemte Town Abdisa Gemechu & Lelisa Chala*

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Abstract	Article Information
The main objective of this study was to examine the level of occupational stress among primary school teachers in Nekemte Town. The study was conducted with descriptive survey that included both quantitative and qualitative data collection methods. Random and purposive sampling techniques were employed to select participants of the study. One hundred and fifty two (72 male and 80 female) teachers were participated in the study. Questionnaire (five-point Likert type response with five sub-scales) and interview were instruments used to collect data. The instrument had the reliability coefficient of .91. Frequencies, percentage, mean score, standard deviation, independent t-test and one way- ANOVA were used for quantitative data analysis at 0.05 significance level. Qualitative data were analyzed thematically. The result of the study indicated	Article History: Received : 10-10-2018 Revised : 15-11-2018 Accepted : 25-12-2018 Keywords: Stress, Stressor, Level of stress, Occupational stress, teacher stress
that the majority of Primary School teachers in Nekemte Town were experienced significantly high to moderate level of stress. Teachers'	*Corresponding Author: Lelisa Chala*
occupational stress was not significantly different in respect to their gender, grade level taught, and teaching experience (p>.05). Finally, it is suggested to launch extensive stress management and counseling programs across schools alongside providing training on effective coping skills.	E-mail: lelisachala@yahoo.com

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INTRODUCTION

Literature reveals that stress is prevalent in a teaching profession. Stress among teachers is a widespread phenomenon (Parray, Kumar & Awasthi, 2016; Kyriacou, 2001). Recently, professional satisfaction has been decreasing while job pressure has been on a steady rise for teachers. These issues have raised many questions about the growing problem of teachers' stress (Guglielmi & Tatrow, 1998). It has been reported that teacher stress impacts the learning environment and ultimately contributes to the achievement of educational goals. In addition,

stress related problems were reported to influence teaching to be disinterest, negligence, bitterness, absenteeism and dropout of the profession (Baraza, Simatwa & Gogo, 2016).

According to Lazarus and Folkman's (1998) theory, stress is a state of psychological pressure influenced by three main sources: personality mediators (comprised of time pressure, driven behavior, attitude posture, relaxation potential and role definition), environmental factors (comprised of vocational satisfaction, domestic satisfaction & health posture) and emotional responses (comprised of hostility, anxiety & depression). The authors noted that the three sources were

suggested to be studied interactively to develop a comprehensive account of stress.

Furthermore, it is common to experience stress in work place known as job or occupational stress. Occupational stress can be defined as harmful physical and emotional responses that occur when the requirement of jobs do not match the capabilities, resources or needs of worker (Akinboye, Akinboye & Adeyemo, 2002). Over the past ten years, research has established high stress to be associated with psychological distress, which may be mediated through different coping mechanisms and personality traits (Chan, 1998). With regard to school organization, it is also common to observe occupational stress among teachers.

Teachers are exposed to a number of sources of stress. Kyriacou (2001) reported that the main sources of teacher stress were students' classroom discipline, workload, relationships related to other teaching staff members and work environment. The author warns that the main sources of stress experienced by a particular teacher can be unique to him or her and can depend on the precise complex interaction between his or her personality, values, skills, and circumstances.

Teacher stress is impacted by environmental factors as well as individual characteristics. Major environmental factors include poor working conditions, scarcity of resources, heavy workloads, and student behavior. Individual characteristics include gender, age, personality, and the ability to cope. These factors reported to lead novice teachers to leave the profession as of their employment (Guglielmi & Tatrow, 1998).

As it is in many parts of the world, in Ethiopia, the teaching profession is known with low remuneration, high workload, poor workplace condition, low social status and stumpy professional support (Gebrekistos, 2015; Darge, 2002). Moreover, teaching in Ethiopia is not an easy task (Workeneh & Tasew, 2013); as a result it is full of stress (Gebrekistos, 2015). Teachers are pressured to fulfill government's interests by producing competent citizens. Teachers are expected to impart their knowledge and skills to improve student learning. The school wants teachers to be role models. Schools demand Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35 teachers to be professionals, leaders and advisors. In addition, community expects teachers to socialize and enable their children. Above all, the success and failure of students' learning are in large attributed to teachers' effort by the general people. Furthermore, at school level teachers are busy in managing discipline, facilitating learning, coordinating curricular activities and monitoring student progress at all levels of education. Hence, executing all these activities would generate stress as failure could direct teachers for some types of suctions (Kyriacou, 2001).

In addition to professional responsibilities, teachers are accountable for managing their lives and families. They want to appear in a community being role models. However, practical life conditions show that teachers' income is low in relation to market price compared with other sector workers. At lower school levels, most teachers have no additional income through which they can support their life. They have no compensations like for house allowance, transportation and other similar fringe benefits. Therefore, it is clear that there must some worries and stress among teachers. For that matter, it is worth contributing to study the extent of occupational stress of teachers in order to suggest ways to overcome the problem as failure to properly manage it may negatively influence teachers' professional roles and health (Kyriacou, 2001).

Therefore, this study is aimed at examining level occupational stress of teachers in Nekemte town primary schools. To this effect, the study attempted to provide answers for the following two research questions.

- 1. What is the level of occupational stress among Primary Schools Teachers in Nekemte Town?
- 2. Are teachers significantly different in their level of stress in relation to their sex, year of experience and grade level taught in Nekemte primary schools?

Occupational Stress Level of Teachers

Teacher stress can be defined as the experience by a teacher of unpleasant and negative emotions such as anger, frustration, anxiety, depression, and nervousness resulting from some aspect of

their work (Kyriacou, 2001). While this definition is widely accepted, there is no agreement on what stress is, as the term holds different meanings for different people. The difference in the definition of teacher stress is influenced by how that person is affected by his/her job demands, and his/her ability to cope with these demands (Parray, Kunar & Awasthi, 2016; Blasé, 2000). The impact of teacher stress depends upon an individual's social support, personality characteristics, and job satisfaction (Guglielmi & Tatrow, 1998).

For that matter, there is an urgent need to know the occupational stress level of teachers for that it plays determinant role on personal and professional health of teachers (Botwinik, 2007). According to Gebrekistos (2015), all the secondary school teachers experienced high level of occupational stress. A study conducted by Sprenger (2011) showed that 72 percent of teachers described the teaching profession as "extremely stressful or "very stressful" with 18 percent indicating it as "somewhat stressful". Zedan (2012) reported that 91.3% of the teachers in Israel found to be experiencing stress in relation to their professional responsibility. According to Tashi (2014), in Bhutan more than half of teachers participated in the study regarded the teaching profession as moderately stressful. More interestingly, the would be teachers found to experiencing fairly often or very often of stress for their being joining the teaching profession (Yirgalem, Aschalew, Million & Tessema, 2014) in case Ethiopia.

On the other hand, the study conducted by Govindarajan (2012) in Tamilnadu pointed out that the stress experienced among primary school teachers were at mild level. Similarly, the assessment carried out in Malaysia bv Abdulsalam, Hashim, Moin, and Abdullah (2010) revealed that the majority of the respondents experienced medium level of occupational stress. Besides, Olivier and Venture (2003) reported that it was only about 20 percent of the teachers who were supposed to suffer from severe stress. In connection, Mearns and Cain (2003) suggested that not all teachers experience the negative effects usually associated with chronic stress. Hence, stress level is not the same for different

Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35 countries. Some are reporting severe to high while others suggesting it as moderate to low.

This is a good point of inspiration to examine the level of stress of teachers in Ethiopia, especially at primary level where teachers are supposed working under pressures of low income, low social status, unattractive school environment and high teaching load.

Sources of Teacher Occupational Stress

Teacher stress has a variety of sources. When teachers have difficulty of negotiating various aspects of interactions with students', they encounter circumstances that are considered too demanding, depriving of time, and interfering with instruction, they often experience stress (Hepburn & Brown, 2001).

Guglielmi and Tatrow (1998) found that teacher stress is caused by environmental factors as well as individual characteristics. Major environmental factors include poor working conditions, scarcity of resources. heavy workloads, and student behavior. Individual characteristics can include gender, age, personality, and the ability to cope. These factors reported to influence novice teachers leaving the profession as early of employment and if given the opportunity, most of these teachers share that they would never choose the profession of teaching again (Yirgalem, Aschalew, Million & Tessema, 2014).

In an exploratory factor analysis carried out by Kokkinos (2007) in Cyprus, pupils behavior problem, relationship problem with colleagues, ambiguity of role, poor working conditions, lack of pupil respect for the teachers, work load, lack of appreciation of teachers by their colleagues, time stress, certain teaching demands were found to be the main sources of stress. Newstrom (2002) forwarded that work overload and time deadlines put teachers under pressure. Ncube (2013) also has revealed that the major causes of stress among primary school teachers were poor pay, work overload, bad school management role, overload and large class sizes. Excessive work overload and long teaching hours, role ambiguity, poor working conditions and overcrowded classes contributed towards teacher stress (Meng & Liu, 2008; Blasé 2006; Litman, 2006; Kyricou, 2001).

In Ethiopian schools, low salaries scheme, extra work load and the like have been identified as de-

motivating factors for teachers (Workeneh & Tassew, 2013). These factors serve as driving force for low morale of teachers (Ayalew, 2009) which could trigger stress in them. For that reason, many teachers wanted to change their profession (Workneh & Tasew, 2013). In connection to sources of stress for Ethiopian teachers, Gebrekistos (2015) revealed that the main stressors were interpersonal related sources, administrative related sources and student-parent related sources. Darge (2002) on the study he conducted on Government Senior High Schools of Addis Ababa, reported that salary and opportunities, student characteristics. performance evaluation. time pressure, resources, regulations and relations were stressor of teachers. This shows that there is need to study on the subject under discussion in all parts of the country.

Differences in Level of Occupational Stress

Study results show that there exists difference level of occupational stress among teachers with regard to their some characteristics. Accordingly, Tashi (2014) indicated that male teachers faced more stress than their female counterparts. Similarly, in South Africa, teachers as a whole were experiencing significant levels of stress to which females experiencing more stress than males (Willers, 2009). Contrarily, Joshi (2007) found out that, men and women experiencing stress comparably. Abdulsalam, Hashim, Moin and Abdullah (2010) showed that there was no significant association between level of stress and gender of teachers.

Moreover, Tashi (2014) found out that teachers with working experiences of over 10 years had significant high mean stress score than those served less than 10 years. Reversely, Ncube (2013) discovered that stressors affect more those teachers who served five or less years though the respondents felt that teaching has not got the attraction it deserves. In the same way, Govindarajan (2012) pointed out that there was no significant difference of level of occupational stress among teachers as their year of teaching experience is considered.

Furthermore, Gebrekistos (2015) indicated that gender, work place and family size have no effect

Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35

in experiencing occupational stress among teachers. According Darge (2002), there were differences of stress level between male and female teachers and between different educational levels to which pedagogy trained male teachers appeared to be subject to greater stress than their female counterparts.

The literature presented show that there exist differences of stress level among teacher. This requires to clearly determining its status in the current study areas in order to fairly manage the problem.

MATERIALS AND METHODS

A descriptive survey method was used to conduct the study. The study utilized both quantitative and qualitative data. According to Creswell & Plano Clark (2007), a research that uses both quantitative and qualitative data is an appropriate research method to get a description of a problem.

Participants of the Study

Data source of the study was Primary Schools Teachers in Nekemte Town. In the year 2016 during the data of the study collected, from the total of 11 primary schools in the town, there were 247 (112 male and 135 female) teachers. Yemane (1967) sample size determination formula was used to decide the sample size. Both random and purposive sampling techniques were used to select schools and participants of the study. Accordingly, from the 11 primary schools and 247 total population, six schools and 156 (72 male & 80 females) teachers were selected randomly. In addition, for interview purpose, six (M=3 & F=3) teachers (one teacher from each sample school) were purposely selected.

Instrument of Data Collection

The Teachers' Stress Inventory of from Fimian and Fastenau (1990) was adapted and used as main data collection instrument. Some items such as manifestation of stress were deleted and some were rephrased to suit to the present study objectives. To the instrument, three items were included based on literature reviewed to better outfit the purpose of the current study. This data collection instrument consisted 55 items of 5 subscales. It was responded on a 5 point scale responses. The instrument was pilot tested for its content validity and reliability. The reliability of the

total instrument was .91. The subscales' reliability were 0.90, 0.87, 0.83, 0.78 and 0.70 for time management, work related stressors, professional stress, discipline/motivation and professional investment respectively.

Method of Data Analysis

After data collection, quantitative data were organized, coded, tabulated and checked for appropriateness and analyzed using SPSS version 20. Descriptive statistic (Frequency, percentage, mean, and standard deviation) and inferential statistic (independent sample t-test, and

Table 1: Characteristics of respondents

Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35 One-way ANOVA) were employed for analysis. The statistical test was conducted at significance level of α = .05. In addition, the data obtained through open ended questions and interview guides were analyzed qualitatively by summarizing their words as a supplement to quantitative data.

RESULTS AND DISCUSSION

Characteristics of the Respondents

The respondents' characteristics were examined in terms of sex, grade level of teaching and years of services as indicated in Table 1 below.

Variables		Frequency	Percent
Sex:	Male	72	47.4
	Female	80	52.6
Grade Level Taught	First Cycle(1-4)	55	36.4
_	Second Cycle(5-8)	97	63.6
Teaching Experience	1-5 years	20	13.4
	6-10 years	17	11.0
	11-15 years	25	16.7
	Above 15 years	90	58.8

The sample comprised of 47.4% male and 52.6% female teachers. While 63.6% of teachers were served in second cycle, the remaining 36.4% were employed in first cycle. The majority (86.5%) of the teachers were served more than 5 years where as there were only 13.4% teachers had a service year of less than 6 years.

Level of Occupational Stress of Teachers

The first research question asks the level of occupational stress of teachers found in Nekemte Town Primary school. Table 2 presents occupational stress level of the teacher respondents.

Table 2: Level of Occupational Stress of Teachers

Level of Stress	Frequency	Mean	Percent
High Stress	84	Above 3.29	54.66
Moderate Stress	65	1.9 -3.28	43.32
Low stress	3	Bellow 1.9	2.02

Occupational stress level of teaches was compared with cut-off point of Fimaian (1990).

As indicated in Table 2 above, 84(54.66%) of respondents indicated that they felt high stress. The remaining 43.32% and 2.02% suggested that there stress level was moderate and low

Differences in Levels of Occupational Stress

In the analysis of differences in level of occupational stress among teachers, gender, grade level taught and teaching experience in respectively. This indicates that there was about high stress level among teachers in Nekemte Primary Schools.

years variables were considered. Table 3 presents the t-test of difference of level of occupational stress between male and female teachers

150, p > .05). This shows that male and female

teachers had comparable level of occupational

		Gender					
	Males	Fe	males		t df	p-value	
М	SD	М	SD				
3.41	0.57	3.37	0.65	0.5	150	0.62	

stress.

. Table 3: Gender Difference in Occupational Stress Level

As Table 3 indicates, there was no statistical significant difference in occupational stress level between male and female participants (t=0.5, df=

Level of Occupational stress difference by Grade Level Taught

Table 4 presents mean scores and standard

deviation of level of occupational stress by grade level taught by teachers.

Table 4: Occupational stress Level Difference by Grade Level Taught

Grade	Level they	Faught					
First cycle(1	I-4)	Second Cyc	le(5-8)	t	df	p-value	
М	SD	М	SD				
3.33	0.53	3.22	0.60	0.21	150	0.83	

Table 4 shows that there was slight mean score difference on level of occupational stress between teachers teaching in first (M=3.33, SD=0.53) and second (M=3.22, SD=0.60) cycles. The test of difference (t=0.21, df= 150, P>.05) indicate that there was no statistically significant difference between teachers teaching in the two cycles. Hence, the result reveled that being in the first cycle or second cycle was not a sufficient ground

for teachers to experience different level o occupational stresses.

Level of Occupational Stress Difference by Teaching Experience

To present the test of difference of level of occupational stress with regard to teaching experience in years, table 5 presents the mean category with respect to teaching experience

Table 5: Level of Occupational Stress Difference by Teaching Ex

		Te	eaching E	xperience ir	n Years		
1-5 y	rs	5-10 y	rs	11-15 yı	ſS	Above 15	yrs yrs
М	SD	М	SD	М	SD	М	SD
3.43	0.51	3.59	0.58	3.33	0.78	3.38	0.58

Table 5 shows the mean and standard deviations of the four categories with respect to teaching experience. As Table 5 indicates, there were slight mean differences among the four service year of categories. Relatively, the mean of the category of 5 to 10 (M = 3.59, SD = .58) is the highest. However, all the remaining mean and standard deviations were comparable. One-way ANOVA test of the difference is presented in the following table.

	df	SS	MS	F p-	value
Between groups	3	0.534	0.178	0.47	0.704
Within groups	148	56.224	0.380		
Total					
Total	151	56.758	0.558		

Table 6: ANOVA Summary Table of Difference of Level of Occupational Stress by Teaching year

As can be seen in Table 6, there was no statistical significant differences of level of occupational stress among the teachers' with regard to their teaching experience (F (3, 148) = 0.47, p > .05). This implies that, teaching experience in years has not showed variation on the level of occupational stress among primary school teachers in Nekemte Town.

The following is the summary of data obtained from open ended items of the questionnaire administered and interview conducted.

To open ended items of the questionnaire, in average, teachers suggested that they were experiencing some level of stress. This can be understood from what one respondent wrote "I hate the day I joined the teaching profession for that I couldn't feed enough my children". Many of the respondents wrote that the teaching profession is paying unattractive salary, has no other fringe benefits and it is a socially undermined profession, though some suggested they are happy for being a teacher. A large number of teachers have complaint on the teaching profession for that there are undesirable student behavior and discipline, large class size, poor student motivation of learning, high teaching load. unfair school administration practices, poor and untimely payment of salary and other similar problems.

On interview conduct, with regard to respect given to teachers by community, one participant said that, "People really don't know how much work we are doing; nobody is appreciating teachers." Another respondent said, "I will change my profession lucky enough if I get other attractive jobs like working in bank, telecommunication and others where I can get a lot per diem per a day." According to the view points of these respondents, teachers feel they are under paid and socially undermined which could be source of occupational stress.

DISCUSSION

The study was conducted to examine the level of occupational stress of teachers. In addition, attempts were made to determine differences in level of occupational stress among teachers with some variables. The discussion of the result of the study is present in subsequent section.

The Level of Occupational Stress among Teachers

The first research question was about the level of occupational stress among primary school teachers in Nekemte Town. To this end, the result of the study revealed that teachers in primary schools in Nekemte Town have been experiencing high to moderate level of occupational stress. The result supports the previous study findings. For example, it was reported that teachers were under extreme stress (Pithers & Sodden, 1998; Kyriacou & Chien, 2004; Meng & Liu, 2008). Consistent to the current finding from the same country of study, Gebrekistos (2015) suggested that all the secondary school teachers in which his study was conducted, experienced high level of occupational stress

On the other hand it was reported as moderate for primary school (Agai–Demjaha, Bislimovska & Mijakoski, (2015). In addition, Baraza, Simatwa and Gogo (2016) depicted that among the participants of the study, 6.06% of the teachers recorded low levels of stress, 37.37% recorded moderate levels of stress and 56.57% recorded high levels of stress. Different results on level of occupational stress among various studies may be attributed to the focus given for teaching profession in the country the study was conducted. Hence, it becomes important to determine the level of occupational stress of teachers at different teaching level and places.

Differences on Level of Occupational Stress by Gender

The second research question was about the differences in level of occupational stress among teachers as a function of some of their characteristics. The result of the study showed that male and female teachers in Nekemte Primary Schools had comparable level of stress. This implies that gender was not a sufficient ground for variation on the level of occupational stress among primary school teachers in Nekemte Town. It is interesting to obtain such findings where in Ethiopia male and female confront different challenges in their work environment. Concomitantly, many studies reported that gender was not a factor for variation in level of occupational stress among teachers (Abdulsalam, Hashim, Moin & Abdullah, 2010; Chopra, 2008; Joshi, 2007; Kyriacou & Chien, 2004).

More relevantly, Gebrekistos (2015) indicated that gender has no effect in experiencing level of occupational stress among the teachers, though Darge (2002) proved that there was level of occupational stress between male and female teachers. The current study result contradicted the earlier finding may be in that the Darge's study was conducted in capital city of the country where male and female confront different type of problems; or may be due duration of study as Parray, Kumar and Awasthi (2016) complained that stress had the characteristic of somersault.

With regard to teaching subject, in the current study, teachers were not significantly different in their level of occupational stress. The result suggests that stress of teachers was not varied as of teaching in different grade levels. For that matter, grade level was not sufficient condition for variation of level of occupational stress among Nekemte Town Primary School teachers. To this end, Sprenger (2011) reported that no differences in level occupational stress with regard to grade level taught.

Furthermore, in the current study, level of stress of teacher was not varied as an effect of the teachers' teaching experience. In line to this, many earlier studies indicated similar finding (Abdulsalam, Hashim, Moin & Abdullah, 2010; Kyriacou & Chien, 2004). This means that teaching experience was not a factor for difference of level of Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35

stress among teachers participated in the study though there were study results that contradict current finding (Darge, 2002). Aftab and Khatoon (n.d.) indicated that teachers with an experience of 6-10 years face occupational stress the most and 0-5 years the least. Thus, more researches are required to determine such differences in teacher stress area.

CONCLUSIONS

Though everyone experiences stress, as the finding of the current study depicted, teachers in Elementary Schools in Nekemte Town were experiencing moderate to high level of occupational stress even that more tends to high degree. As stress is a state of mental tension and worry caused by problems in one's life, work, etc. it has negative effect on individuals' health and on the quality of work performed by them (Aftab and Khatoon, n.d.). As the result, it requires proper management. On the other hand, the non-existence of significant differences of level of occupational stress with regard to gender, grade level teaching and teaching experience of teachers' characteristics suggest to additionally considering other factors such as salaries or fringe benefits includina the problems related school to environment.

RECOMMENDATIONS

This study attempted to examine level of occupational stress and differences among primary school teachers in Nekemte Town. As per the findings of this research, the following recommendations are forwarded for intervention.

Stress can affect both health and productivity of individuals. So, there is a need to provide proper conducive environment and support teachers to properly manage stress evident at their workplace. Teachers should be positive in facing their challenges, which will help them in improving their functional skills and reduce stress, so that their profession is not affected. It is recommended that regular assessment of level of occupational stress should be conducted for preventive measures. Guidance and counseling service is highly encouraged to be established in schools in order to provide psychiatric help for teachers with stress.

Besides that, Ministry of Education, Oromiya Bureau of Education and school managements should check that, supervision, support and relationship with the teachers is properly taken care of and enhanced most strongly. Most importantly, it is recommended that principals and supervisors should investigate the causes for stress and evaluate the organizational climate of the school. They should also suggest ways, like training and workshops to alleviate and cope with stress.

REFERENCES

- Abdulsalam, N. I., Hashim, Z., Moin, S. & Abdullah, H. (2010). Assessment of stress and its risk factors among primary school teachers in Klang Valley, Malaysia. *Global Journal of Health Science*, 2 (2), 163-171.
- Aftab, M. & Khatoon, T. (n.d.). Demographic differences and occupational stress of secondary school teachers. *European Scientific Journal March edition*, 8(5), 159-175.
- Agai–Demjaha, T., Bislimovska, J.K. & Mijakoski, D. (2015). Level of Work Related Stress among Teachers in Elementary Schools. *Open Access Macedonian Journal of Medical Sciences, 3*(3): 484-488.
- Akinboye, T. O., Akinboye, D. O. & Adeyemo, D.A. (2002). Coping with stress in life and workplace. Lagos: Stirlin-Horden.
- Ayalew Shibeshi (2009). Secondary school teacher development in Ethiopia: Challenges and policy options for redressing the imbalances. A report submitted to the 16th, International Conference of Ethiopian Studies.Hawas, Ethiopia.
- Baraza, O.T., Simatwa, E. M. W. & Gogo, J. O. (2016). Levels of Stress among Secondary School Teachers and its Implication on Students' Academic Performance in Kenya: A Case Study of Kakamega North Sub County. Greener Journal of Educational Research, 6(2), 52-66
 - Blasé, J. (2006). A qualitative analysis of sources of teacher stress: Consequences for performance. *American Educational Research Journal, 23*(1), *13-40.*

Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35

- Botwinik, R. (2007). Dealing with teacher stress. Clearing house: A Journal of Educational Strategies, Issues and Ideas, 80(6), 271–72.
- Chan, D.W. (1998). Stress coping strategies, and psychological distress among secondary school teachers in Hong Kong. *American Educational Research Journal, 35*(1), 145-163.
- Chopra, J. (2008). *Ten sure ways of tackling stress*. London: Hodde.
- Creswell, J. W. & Plano, C. (2007). *Qualitative inquiry & research design* (2nd ed.). Sage Publications: Thousand Oaks, CA.
- Darge W. (2002). The predominance of different sources of stress among teachers in government high schools of Addis Ababa, *The Ethiopian Journal of Education*, *12*(1), 1-32.
- Fimian, M.J. & Fastenau, P. S. (1990). The validity and reliability of the teacher stress inventory: a re-analysis of aggregate data. *Journal of Organizational Behavior*, *11*(2), 151-157.
- Gebrekirstos, H. A. (2015). Occupational stress among secondary school teachers and their coping strategies: the case of central zone of tigray region. *International Journal of Academic Research Education Review, 3*(6), 143-157.
- Govindarajan, K. (2012). A study on level of stress and coping strategies among primary school teachers in Tamilnadu. *International Multidisciplinary, 1*(1) 19-25.
- Guglielmi, R., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research, 68*(1), 61-99.
- Hepburn, A., & Brown, S. (2001). Teacher stress and management of accountability. *Human Relations*, *54*(6), 691-715.
- Joshi, M. (2007). *Teacher understanding of student understanding*. Urbana: Illinois.
- Kokkinos, C. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77(1), 229-243.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, *53*(1), 27-35.

- Kyriacou, C. & Chien, P. (2004). Teacher stress in Taiwanese primary schools. *Journal of Educational Enquiry*, *5*(2), 86-104.
- Lazarus, R. S. & Folkman, S. (1998). Stress, appraisal, and coping. New York: Springer
- Litman, J. A. (2006). The cope inventory: Dimensionality and relationships with approach-and avoidance motives and positive and negative traits. *Personality and Individual Differences*, *41*(2), 273-284.
- Mearns, J. & Cain, J. (2003). Relationship between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. *Anxiety, Stress and Coping, 16*(1), 71-82.
- Meng, L. & Liu, S. (2008). Mathematics teacher stress in Chinese secondary schools. *Journal* of Educational Enquiry, 8(1),73-96.
- Ncube, A.C. (2013). Factors contributing to the cause of work-related stress and its impact on performance of teachers in Zimbabwe. *Nova Explore Publication, 1*(1), 15-23.
- Newstrom, L. (2002). Anxiety and stress disorders: Cognitive and behavioral assessment. N.Y.: Guilford Press.
- Olivier, M. A. J. & Venter D. J. (2003). The extent and causes of stress in teachers in the George region *South African Journal of Education, 23*(3), 168-192.
- Parray, W. M., Kumar, S. & Awasthi, P. (2016). Stress among Teachers. *A theoretical examination, 3*(4), 88-97.

Sci. Technol. Arts Res. J., Oct.-Dec. 2018, 7(4): 26-35

- Pithers, R. & Soden, R. (1998). Teacher Stress and Strain. *British Journal of Educational Psychology*, 68(4), 269-281.
- Sprenger, J. (2011). Stress and coping behavior among primary school teachers (Master's Thesis), East Carolina University, USA.
- Tashi, K. (2014). Occupational stress among Bhutanese teachers. Asian Journal of Management Sciences and Education, 3(2), 71-79.
- Willers, M. (2009). Stress, coping behavior and the psychological well-being of a group of South African teachers. The SABPA Study.
- Workeneh Abebe & Tassew Woldehana (2013). Teacher training and development in Ethiopia: Improving education quality by developing teacher training skills, attitudes and work conditions. Addis Ababa: Yong Lives.
- Yamane, T. (1967). Statistics: *An introductory analysis* (2nd Edition). New York: Harper and Row.
- Yirgalem Alemu, Aschalew Teshome, Million Kebede & Tessema Regassa. (2014). Experience of stress among student-teachers enrolled in postgraduate diploma in teaching (PGDT): The case of Haramaya University cluster centers, Ethiopia. *African Educational Research Journal, 2*(3), 96-101.
- Zedan. R. (2012). Stress and coping strategies among elementary school teachers in Israel. *Universal Journal of Education and General Studies, 1* (9), 265-278.