

A Comparative Study on Occupational Stress of Teachers Working at Different Levels in Sikkim

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Abstract

The current investigation seeks to identify occupational stress experienced by teachers across different educational levels, namely primary, secondary, and senior secondary, within the Sikkim state. The study is limited to the east district of the region. The primary objective of this research is to comprehensively examine both overall and component-specific aspects of teachers' occupational stress. Additionally, the research aims to analyze the variation in occupational stress levels among male and female teachers across different levels of education. Data were collected from 90 teachers in the east district of Sikkim using standardized questionnaires. The research employs the Occupational Stress Scale, a standardized tool developed by Srivastava & Singh (1981), consisting of 46 items, which were utilized in this study. The collected data were subjected to statistical analysis using Mean, Standard Deviation, and 't' ratio. The obtained results led to several findings and conclusions.

Keywords: stress, overload, teaching occupation, and conflicts.

INTRODUCTION

The word 'stress' was first introduced into the fields of biology and medicine in 1926 by an Austrian endocrinologist, Hans Selye, working in Canada (as cited in Med J. 2018). His concept of stress at that time was a physiological one and throughout his life, the psychological factor of the occurrence of stress was not given as much consideration as he gave to the physiological factor. Today, stress has become a multipart concept that is complicated to define. A general and popular definition is to describe it as a procedure in which environmental forces pressure an individual's well-being. According to **Cordon (1997)** The term "stress" is often used to describe negative emotions and reactions that occur during challenging situations. However, not all stress is bad; some amount of stress is necessary for survival. For example, the most stressful experience in life is birth. The high level of hormones released during birth, which are also involved in the stress response, helps the newborn adapt to life outside the womb. These biological responses to stress make the baby more alert, promote bonding with parents, and contribute to the child's physical well-being.

Occupational stress

According to **Margolis and Kores (1974)**, "Occupational stress is a condition worth interacting with worker characteristics to disrupt psychological and physiological homeostasis. The causal situation conditions are job stressors and the disrupted homeostasis is job-related stress" (As cited in Kaur, S. 2011).

The above views explain that "occupational stress" is a situation where certain things at work can mix with a person's qualities and traits to disturb their mental and physical balance. Imagine it like mixing ingredients in a recipe. The ingredients here are the things at work and the person's qualities. When they come together, they can create a situation that messes up how the person's mind and body normally stay balanced and healthy. This balance is called "psychological and physiological homeostasis." Now, let's talk about the specific things at work that cause this disturbance. These things are called "job stressors." Think of them as obstacles or challenges at work. They could be things like having too much to do, feeling pressure from tight deadlines, dealing with difficult situations or people, and so on. When these job stressors come into the picture and mix with the person's qualities, they can disrupt the balance we talked about earlier. This disruption is what they call "job-related stress." It's like throwing a wrench into a well-working machine – things start getting out of whack and the person starts feeling stressed. So, in summary, according to Margolis and Kores, occupational stress is when the things at work and a person's qualities come together to mess up their mental and physical balance. The things at work causing this are job stressors, and the messed-up balance is what they call job-related stress.

Stress

Stress is the body's response to various situations, whether they are good or bad experiences. When people encounter stressors in their surroundings, their bodies release chemicals into the bloodstream, providing them with more energy and strength, which can be beneficial when facing physical threats. However, it can also be challenging if the stress is triggered by emotional factors without an outlet for the extra energy and power. In simple terms, stress is commonly perceived as feeling tense, anxious, and worried, and it can have both positive and negative effects. It is a natural reaction to events that challenge a person's ability to cope. When we sense danger, whether real or imaginary, our body activates the "flight-or-fight" response, preparing us to deal with the situation (Sutton, 2022). Such being the case, it can be understood that this response is the body's way of protecting itself. When it works properly, it helps us stay alert, energetic, and attentive. In critical situations, stress can even save our lives by giving us extra strength to defend ourselves. The stress response also helps us face and overcome challenges.

Schermerhorn (2005) Occupational stress is a state of strain experienced by people when they face demanding and challenging situations at work. It has become a significant aspect of modern life, affecting employees' behavior and their job performance. As a result, research on occupational stress in the workplace has grown in recent years. Occupational stress is about the relationship between a person and their work environment. Stress occurs when the demands at work exceed a person's ability to cope with them, creating a potential imbalance between the rewards and costs of meeting those demands. This has made occupational stress a well-known topic of study in the workplace.

In connection with the above view of Schermerhorn, he talked about occupational stress. He explains that it is a feeling of pressure that people experience when they're faced with difficult and challenging situations at their jobs. Imagine it feeling really tense or overwhelmed when you have a lot of things to do and they're not easy tasks. Now, think about how common this kind of stress has become in our modern lives. It's something that affects how people act and perform their jobs. So, if someone is stressed because of their work, it can make them act differently and even impact how well they do their tasks. Because of how important this is,

there has been a lot more research about occupational stress at workplaces in recent years. People want to understand it better and find ways to deal with it. Here's the core idea: Occupational stress is about how a person and their work environment (the place they work and the tasks they do) interact. Stress happens when the things they have to do at work are really tough, and they feel like they can't handle all those demands. It's like having too many things to juggle at once and feeling like some might drop. This creates an imbalance between what they have to do and how much they can handle. Because this is a big deal, a lot of studies and research have been done to learn about it and figure out how to make workplaces better for everyone. So, when people talk about occupational stress, they're really talking about how the demands of a job can sometimes be too much for a person to handle comfortably.

Teaching occupation

Teaching has been recognized as one of the most stressful occupations in numerous countries. (Cooper et al. 1988) Teaching-related stress, also known as 'teacher stress,' refers to the unpleasant emotions, such as anger, anxiety, tension, frustration, or depression, that teachers experience due to their work. Like other types of occupational stress, it can have significant consequences for both the teacher's well-being and the organization they work for. Personally, teaching-related stress can impact a teacher's health, well-being, and job performance.

Singhal (2004) conducted a study on “art teachers' stress”, and it was found that female teachers tend to feel more anxious and stressed than male teachers. Interestingly, though, female teachers also showed higher self-confidence because they felt skilled in their studies. The research also showed that, overall, art teachers felt more anxious and stressed than science teachers. This might be because science teachers appeared to be more competent in their academic abilities.

Mondal et al (2011) examined the stress experienced by primary school teachers, revealing a noteworthy gender disparity. Male teachers reported higher psychological stress compared to their female counterparts, while female teachers exhibited lower levels of physical stress than male teachers.

Humberto et al (2011) investigated the impact of occupational stress on academic and administrative staff, encompassing teachers. The findings unveiled stress-related factors such as organizational demands, health concerns, and stress management. Interestingly, the study revealed divergent levels of occupational stress among academic staff, administrative staff, and teachers, although overall stress levels were comparable across genders and age groups.

Aggarwal (2012) explored the connection between self-efficacy and occupational stress in academic faculties at Punjab University and Guru Nanak Dev University. The outcomes highlighted the significant influence of self-efficacy in predicting role insufficiency and ambiguity. The study recommended organizing self-efficacy training workshops for teachers to enhance their ability to cope with stress arising from role-related challenges.

Collie et al (2012) delved into the correlation between school climate, social-emotional learning, and teacher well-being. Results emphasized that teacher perceptions of student motivation and behavior within the school climate exerted the most substantial impact. These factors notably predicted stress levels, teaching efficacy, and job satisfaction among participants.

Pie Wang et al (2014) conducted a study titled "Survey of Occupational Stress of Secondary and Elementary

School Teachers and the Lessons Learned." Through a questionnaire, they examined occupational stress among 500 teachers in Xinjiang's teaching municipality. Findings indicated significant occupational stress levels in both secondary and elementary school teachers, with greater impact on health than work performance. Notably, gender and years of service were influential factors in the experience of occupational stress.

Ghania, Ahmad & Ibrahim (2014) explored "Stress among Special Education Teachers in Malaysia," scrutinizing stress contributors and levels among special education teachers in Penang, Malaysia. The study underscored pupil misbehavior as the primary stress source, followed by workload, time/resource challenges, recognition, and interpersonal relationships.

Ansarul (2014) undertook a study on "Occupational Stress of Primary School Teachers," contrasting government and private school teachers in Tehsil Laskar, District-Haridwar. The research encompassed 100 teachers, 50 from each sector, revealing elevated stress levels among primary school teachers. Importantly, private school teachers demonstrated even higher stress levels compared to their government counterparts.

Dachen (2017) presented a comparative investigation into occupational stress among physical education teachers in Jammu and Kashmir. Data collected from 333 teachers across various schools and regions were subjected to analysis. The study utilized independent sample t-tests to assess differences based on gender, sector, and area, ultimately finding no significant distinctions among physical education teachers in Jammu and Kashmir in terms of these variables.

Need and significance of the study

Understanding occupational stress among school teachers in Sikkim is of paramount importance for their overall development and well-being. Due to its isolation from mainstream regions, Sikkim presents unique challenges for teachers to adapt and integrate successfully into their school environments while coping with the academic demands placed upon them. Therefore, conducting a comprehensive study on occupational stress among primary, secondary, and senior secondary school teachers in Sikkim is crucial to identify factors such as work overload, strenuous working conditions, role conflict, educational needs, and as well as all other relevant dimensions. To address these concerns, a researcher has taken the initiative to assess the levels of occupational stress experienced by school teachers in the region. The primary objective of this study is to determine the disparities that negatively impact teachers' occupational well-being in both male and rural female school teachers. By doing so, the researcher aims to provide valuable insights and draw appropriate conclusions that can inform policies and interventions to improve these teachers' overall work environment and support systems.

Objectives Of the Study

The study has established the following objectives:

To comprehensively analyze the occupational stress experienced by teachers, both in its entirety and its specific components, across primary, secondary, and senior secondary levels, while considering gender variations within the context of Sikkim.

Formulation of Hypotheses

The entire hypothesis has been expressed in null form and presented below:

- Ho₁ “There exists no significant difference in the role overload of teachers in Sikkim with regard to male and female variation.”
- Ho₂ “There exists no significant difference in the role ambiguity of teachers in Sikkim with regard to male and female variation.”
- Ho₃ “There exists no significant difference in the role conflict of teachers in Sikkim with regard to male and female variation.”
- Ho₄ “There exists no significant difference in the unreasonable group of teachers in Sikkim with regard to male and female variation.”
- Ho₅ “There exists no significant difference in the responsibility of teachers in Sikkim with regard to male and female variation.”
- Ho₆ “There exists no significant difference in the under-participation of teachers in Sikkim with regard to male and female variation.”
- Ho₇ “There exists no significant difference in the powerlessness of teachers in Sikkim with regard to male and female variation.”
- Ho₈ “There exists no significant difference in the poor peer relations of teachers in Sikkim with regard to male and female variation.”
- Ho₉ “There exists no significant difference in the Intrinsic Impoverishment of teachers in Sikkim with regard to male and female variation.”
- Ho₁₀ “There exists no significant difference in the low status of teachers in Sikkim with regard to male and female variation.”
- Ho₁₁ “There exists no significant difference in the strenuous working conditions of teachers in Sikkim with regard to male and female variation.”
- Ho₁₂ “There exists no significant difference in the unprofitability of teachers in Sikkim with regard to male and female variation.”
- Ho₁₃ “There exists no significant difference in the total occupational stress of teachers in Sikkim with regard to male and female variation.”

Delimitations of the Study

The study specifically targets school teachers in the Sikkim region, with a particular focus on those at the primary, secondary, and senior secondary levels. Only teachers within the school level are included in this research. To collect data for the study, a sample of 90 school teachers from the east Sikkim area has been selected. As a result, the study encompasses all primary, secondary, and senior secondary school teachers in east Sikkim, and the research is confined to schools within the east district of the region.

Operational Definition of The Terms

Occupational stress: “refers to the strain and pressure experienced by individuals in their workplace”.

Primary school teachers: “refers to the educators responsible for teaching children typically aged 5 to 11 years old”.

Secondary school teachers: “refers to the educators responsible for teaching students usually between the ages of 11 to 16 years old”.

Senior secondary school teachers: “refers to the educators responsible for teaching students in the final years of their secondary education, often aged 16 to 18 years old”.

METHODOLOGY

Design

A descriptive research process where researchers collected information by asking people questions. This was done through surveys. Surveys were chosen because they are good at finding out what's happening right now and what most people usually do. This information will be used to see how things are now and to make decisions about what should happen next.

Sample

The researcher picked certain groups of people in a thoughtful way using a method called simple random sampling. They studied 90 teachers from three different groups: 30 from primary schools, 30 from secondary schools, and 30 from Gangtok City, East Sikkim. To make sure the sample showed the whole teacher group well, they made sure to have an equal number of male and female teachers. They used numbers and facts to do their research, collecting and looking at data to figure out what they learned.

Tools

The occupational stress index constructed by “Prof. A.k. Srivastava and Prof. A. P. Singh (1981)” was used. It consists of 46 items, each to be rated on a five-point scale.

Scale Reliability and Validity

To determine the scale's reliability, both the Split Half (Odd Even) method and Cronbach's alpha coefficient were employed. The obtained reliability indices were .935 and .90, respectively. In psychology research, a good measurement tool should ideally have a Cronbach's Alpha of around .90 or at least .60. Given this criterion, the scale can be considered reliable. Additionally, Cronbach's alpha was used to compute reliability indices for each of the 12 sub-scales. The recorded indices demonstrated consistency. The scale's Internal Validity was high at 0.94, indicating strong validity.

The Research Procedure

For this investigation, teachers from various educational levels primary, secondary, and senior secondary in Gangtok were selected as the sample. These teachers represented diverse ages, genders, and teaching experiences, and they taught in both rural and government-managed schools. After finalizing the sample, the researcher chose appropriate tools to assess teaching stress among teachers. The research process was meticulously planned, including data treatment procedures. To systematically analyze and interpret the data, the researcher calculated the mean, median, and standard deviation from the raw scores of different groups and subgroups. To detect significant differences in intra-variations, a ratio analysis was employed. The study

concludes with a concise summary and suggested recommendations drawn from the findings. Furthermore, the report encourages further investigation in this specific area.

RESULTS AND DISCUSSION

**Table 1. The comparison across male and female dimensions and on total Occupational stress of School Teachers in Sikkim is given below.
(Male-47, female- 47, N=94)**

S. No	Variable	Male and female	Means	SD	t
1.	Role Overload	Male	18.04	2.899	0.49
		Female	17.71	3.415	
2.	Role Ambiguity	Male	12.04	2.256	1.45
		Female	12.11	2.113	
3.	Role Conflict	Male	12.69	2.512	1.03
		Female	12.11	2.798	
4.	Political Pressures	Male	11.20	1.926	0.27
		Female	11.31	1.856	
5.	Responsibility for Persons	Male	10.84	1.942	0.32
		Female	10.71	1.914	
6.	Under Participation	Male	10.29	1.926	0.16
		Female	10.22	1.964	
7.	Powerlessness	Male	9.27	1.587	1.22
		Female	8.87	1.517	
8.	Poor Peer Relations	Male	8.71	.920	0.51
		Female	8.87	1.476	
9	Intrinsic Impoverishment	Male	8.80	.919	2.10
		Female	9.29	1.254	
10	Low Status	Male	8.58	1.138	0.38
		Female	8.49	1.079	
11	Strenuous Working Conditions	Male	7.80	.991	0.49
		Female	7.93	1.514	
12	Unprofitability.	Male	8.51	1.036	1.11
		Female	8.80	1.392	
13.	Total	Male	127.18	11.686	0.54
		Female	126.29	10.723	

The research contrasts the occupational stress scores among school teachers and employs statistical analysis to determine whether a noteworthy disparity exists between male and female teachers in terms of occupational stress. Furthermore, the table includes the outcomes of tests pertaining to occupational stress.

Role overload: The calculated value for the test was 0.49. When compared to the table values at the 0.05 is 1.98 and 0.01 is 2.62 levels, it was not significant. Therefore, the researcher couldn't find a significant difference in role overload between male and female teachers. Thus, the null hypothesis H_{01} : "There is a significant difference in role overload of male and female school teachers" failed to reject the null hypothesis.

Role ambiguity: The calculated value for the test was 1.45. Again, when compared to the table values at the 0.05 and 0.01 levels, it was not significant. So, the researcher couldn't find a significant difference in role ambiguity between male and female teachers. Thus, the null hypothesis H_{02} : "There is a significant difference in the Role ambiguity of male and female school teachers" failed to reject the null hypothesis.

Role conflict: The calculated value for the test was 1.03. However, when compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. As a result, the researcher couldn't find a significant difference in role conflict between male and female teachers. Thus, the null hypothesis H_{03} : "There is no significant difference in the role conflict of male and female school teachers" failed to reject the null hypothesis.

Political pressures: The calculated value for the test was 0.27. When compared to the table value at the 0.05 level and at the 0.01 level it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis and couldn't find a significant difference with regard to political pressures between male and female teachers. Thus, the null hypothesis: "There is no significant difference in the total occupational stress of male and female school teachers" failed to reject the null hypothesis.

Responsibility For Persons: The calculated value for the test was 0.32. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: "There is a significant difference in the responsibility for persons of male and female school teachers" failed to reject the null hypothesis.

Under Participation: The calculated value for the test was 0.16. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: "There is no significant difference in the under-participation of male and female school teachers" failed to reject the null hypothesis.

Powerlessness: The calculated value for the test was 1.22. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: "There is a significant difference in the Powerlessness of male and female school teachers" failed to reject the null hypothesis.

Poor Peer Relations: The calculated value for the test was 0.51. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: "There is a significant difference in the poor peer relations of male and female school teachers" failed to reject the null hypothesis.

Intrinsic Impoverishment: The calculated value for the test was 2.10. When compared to the table value at the 0.05 level, it wasn't significant. But it was significant at the 0.01 level. Therefore, the researcher couldn't reject the null hypothesis and couldn't fully confirm a significant difference in Intrinsic Impoverishment

between male and female teachers. Thus, the null hypothesis: “There is a significant difference in Intrinsic Impoverishment of school teachers in Sikkim” failed to reject the null hypothesis at 0.05 level.

Low Status: The calculated value for the test was 0.38. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: “There is a significant difference in the Low Status of male and female school teachers” failed to reject the null hypothesis.

Strenuous Working Conditions: The calculated value for the test was 0.49. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: “There is a significant difference in the Strenuous Working Conditions of male and female school teachers” failed to reject the null hypothesis.

Unprofitability: The calculated value for the test was 1.11. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: “There is a significant difference in the Unprofitability of male and female school teachers” failed to reject the null hypothesis.

Total occupational stress: The calculated value for the test was 0.54. When compared to the table value at the 0.05 level and 0.01 level, it wasn't significant. Therefore, the researcher couldn't reject the null hypothesis. Thus, the null hypothesis: “There is a significant difference in the total occupational stress of male and female school teachers” failed to reject the null hypothesis.

Conclusion

In conclusion, the study compared the occupational stress scores of male and female school teachers in different areas. The statistical tests conducted on all dimensions of occupational stress were given above and did not reveal any significant differences between male and female teachers. Therefore, the null hypotheses for all these aspects were not rejected, indicating that there were no noteworthy variances in occupational stress between the two groups. However, it is worth noting that the test for intrinsic impoverishment showed significance at the 0.01 level, but not at the 0.05 level, indicating that further investigation might be required to fully confirm this finding.

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