INTRODUCTION

Marked increase in competition throughout the world has resulted in work pressures in all professions. These work pressures in different occupations create stress in employees and stress related with job or occupation is called occupational stress. It can be defined as harmful physical and emotional responses that occur when the requirement of the job do not match the capabilities, resources or need of worker. It is a chronic disease caused by conditions in workplace that negatively affects an individual’s performance and over-all well being of his body and mind. These effects include irritability, anger, fatigue, anxiety, depression, headaches, loss of concentration, sleep disturbances, persistent negative thoughts, low appetite, gastrointestinal problems, musculoskeletal problems, blood pressure, heart disease, stroke, cancer, suicide, etc. to highlight a few from the exhaustive list[1].

The profession of teaching also comes in this broad spectrum of stress. Teachers are expected not only to work as pedagogues but they also need to perform duties of an administrator, resource person, innovator, counselor, facilitator and manager of knowledge which leads to high level of stress. The events and situations that produce stress are called stressors. Stressors that interfere with teacher efforts can be student apathy, student disruption or indiscipline, poor student attendance, low achievement, large number of students in a class, heavy paper or prep work, indifferent attitude of colleagues, obtrusive administrator, ineffective leadership of principals, denial of opportunities for professional development, low salary, unsatisfactory relationships with students, non involvement in decision making, accountability of student progress, fatigue, frustration, helplessness, stagnation, boredom, and loss of motivation or enthusiasm and unsupportive parents, etc[2-7].

Teacher stress not only affects the teacher but also the students[8-9] and even the organization[10]. Continuous exposure to stress situations develops in teachers a sense of self apathy, low self esteem, deprives of motivation and will to teach, loss of confidence, irritability with colleagues, unwillingness to cooperate, frequent irrational conflicts at the place of work, withdrawal from supportive relationships, inappropriate cynical humor, dealing ineffectively with students thus, ultimately lowering the overall performance level. Ultimately, the teacher is left with no other alternative than leaving the profession thus, creating shortage of qualified and talented teachers [11].

To keep the teacher at bay from stress it becomes pertinent to scan out ways to minimize the stress levels. We cannot eliminate stress but can try to manage or cope with it to an optimal level. This can be effectively done through coping strategies that enables to reduce stress. These are the thoughts or actions applied everyday consciously or unconsciously to cope
with physical, cognitive and psychological stressors. Teacher can use any of these coping strategies such as recognize the signs of stress; become a time management expert; pay close attention to physical health; add humor to life; exercise and balanced diet; seeking social support; proper sleep; organize money; healthy relationships; breathing exercises; practicing yoga and meditation; listening to music; engaging oneself to self entertaining activities; etc to manage their stress levels.

Studies conducted [12-29] have attributed stress among various professions including teachers teaching at various levels and coping techniques adopted to manage stress in different situations.

Teachers teaching at the secondary school have to deal with students who are in the adolescent period. This period itself being a period of stress and strain, storm and strife increases the stress among students. To deal with this age group, teachers themselves have to be extra conscious in creating interest, providing proper motivation, guidance, friendly and supportive attitude, care and affection and overall suitable environment to them. A stress free teacher can teach effectively in the class room and can provide better quality of environment to make schools a challenging and interesting centre for the students.

Taking this criterion into consideration, the investigator felt to know the level of occupational stress among these teachers and also which coping strategies they follow to get rid of stress. Even after reviewing the related literature it was felt that although numerous studies had been conducted to identify the stress levels of teachers teaching at various levels (primary, secondary or tertiary levels) but no study has been conducted so far on occupational stress and coping strategies among secondary school teachers of Hoshiarpur District. Thus, the investigator selected the present problem with the objective to analyze the level of occupational stress among secondary school teachers and coping strategies used by them in relation to gender, subject stream and nature of job.

**RESEARCH METHODOLOGY**

**Sample:**
A random sample of 200 secondary school teachers was selected from different schools of Hoshiarpur District. While selecting the sample due consideration was given to factors such as gender, subject stream and nature of job.

**Tools:**
Occupational stress level was measured using Occupational Stress Index developed by Srivastava & Singh[30]. This standardized tool consisted of 46 items each rated on a five point scale. Out of these 28 were true keyed and 18 were false keyed. The scoring of the true keyed items was done as 5 for strongly agree, 4 for agree, 3 for undecided, 2 for disagree and 1 for strongly disagree. The scoring for false keyed items was reversed. The split half and Cronbach’s alpha coefficient reliability was noted to be 0.93 and 0.90 respectively.

Coping strategies were determined by using a self constructed coping strategies scale. The four point scale consisted of 25 items concentrating upon problem focussed, appraisal focussed and emotion focussed coping strategies. A score of 3 was assigned for the coping strategies used always, 2 for often, 1 for sometimes, 0 for never. The test-retest reliability was noted to be 0.88 and the scale was content validated.

**Statistical Analysis:**
The data collected through the tools was subjected to statistical analysis and results were drawn out. Mean and standard deviation of the total sample and relevant sub samples was computed and group comparisons were done by applying t tests. Linear Regression analysis was done to find out the relationship between occupational stress and coping strategies.

**RESULTS AND DISCUSSIONS**
The level of occupational stress and coping strategies as well as comparison of variables is shown in Table 1.

The occupational stress scores of the total sample were distributed into various levels to assess respondents with high occupational stress (156-230), moderate stress (123-155) and low occupational stress (46-122). Table 1 depicts the mean calculated for the whole sample is 138.88 and standard deviation is 25.75. This indicated that secondary school teachers of Hoshiarpur district had moderate/optimum level of occupational stress. Similarly, the scores of coping strategies used were classified as most used (51-75), moderately used (26-50) and least used (0-25). The mean score ( 35.85) highlights that the sample of the study used the coping strategies moderately.

Moderate or optimum level of stress is desirable to stay alert, improve performance and efforts for work, diligence and stimulate creativity[31-33]. Teachers of the sample experienced moderate level of stress may be due to the reason that they might be well aware of stress and its implications and whenever they faced stressful situations they tried to manage or cope with it accordingly. It is also possible that the participants did not accept themselves as stressed as they get satisfaction from their job [34]. Results of previous studies [35-38] are in line with the present study depicting that participants experienced moderate level of stress.
Table 1. Comparisons of Variables for Occupational Stress and Coping Strategies

<table>
<thead>
<tr>
<th>Samples</th>
<th>Total (N)</th>
<th>Mean (M)</th>
<th>Standard deviation (σ)</th>
<th>t-value</th>
<th>Mean (M)</th>
<th>Standard deviation (σ)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary school teachers</strong></td>
<td>200</td>
<td>138.88</td>
<td>25.75</td>
<td></td>
<td>35.85</td>
<td>13.08</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>133.7</td>
<td>26.6</td>
<td>2.91**</td>
<td>35.43</td>
<td>13.6</td>
<td>0.45</td>
</tr>
<tr>
<td>Female</td>
<td>100</td>
<td>144.1</td>
<td>23.8</td>
<td></td>
<td>36.28</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>100</td>
<td>138.7</td>
<td>26.8</td>
<td>0.12</td>
<td>35.28</td>
<td>12.7</td>
<td>0.63</td>
</tr>
<tr>
<td>Art</td>
<td>100</td>
<td>139.1</td>
<td>24.7</td>
<td></td>
<td>36.43</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Adhoc</td>
<td>100</td>
<td>145.8</td>
<td>23.8</td>
<td>3.94**</td>
<td>33.62</td>
<td>13.9</td>
<td>2.46*</td>
</tr>
<tr>
<td>Permanent</td>
<td>100</td>
<td>132.0</td>
<td>25.8</td>
<td></td>
<td>38.09</td>
<td>11.7</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.05 level  **Significant at 0.01 level.

To relieve the occupational stress teachers are moderately using coping strategies thereby, balancing their life. Study conducted by Kyriacou and Chien[39] had stressed that the best way to overcome stress is to adopt effective coping strategies.

The result of t-test of significance of the means (Table 1) applied to each group indicates that male and female as well as adhoc and permanent secondary school teachers differ significantly in their occupational stress scores as the t-values are found to be significant (0.01 level). Female teachers are more stressed than male counterparts and adhoc teachers are more stressed than permanent teachers.

The high occupational stress score of female teacher educators can be due to the fact female teachers have to compete with their male counterparts to prove their capability as it is a male dominated society. They have to exert more to prove their efficiency and sometimes have to sacrifice their professional ambition in favour of the family. Even they have to share their time fulfilling their responsibilities both at work place and with the duties and responsibilities towards their family also. Thus, stressful situations arise both at home and office front. Studies conducted [11, 27, 39, 40-42] confirmed that females were more stressed than males. Findings of studies[43-45, 38,39] are not in line with the present findings. These studies highlighted that no significant difference existed between the stress levels of female and male teachers.

In contrast, the t-value for the coping strategies for male and female teachers is found to be insignificant suggesting that both male and female teachers are adopting similar levels of coping strategies to cope with stress. Results of the study by Munida [46] are also in line with the present study. Although the mean score of female teachers is greater than male teachers for using coping strategies still females are experiencing more occupational stress in comparison to male teachers. This suggests that may be they are not using those coping strategies which should be used to manage particular category of stress or there is interference of other category of stress i.e., family stress or personal stress.

The higher mean score of adhoc school teachers as compared to permanent teachers suggests that permanent teachers teaching in secondary schools of Hoshiarpur District have less stress due to job security, less accountability, less workload, provision of facilities like promotions, grade revisions, increase in daily allowances time to time, leave facilities like casual, extraordinary, medical, maternity, study, etc., general provident fund facility, regular salary, and much more. The adhoc teachers are more stressed may be due to the reason that they are held more accountable, given less facilities and provisions, no job security, more workload, etc. Therefore, they find their jobs more stressful. Stress levels may also be high in teachers who have a worry of their future. Result [47,11] are also in agreement with the findings that adhoc teachers experienced more stress than permanent teachers.

The t-value for the coping strategies for adhoc and permanent teachers also depict significant difference between them with mean score of permanent teachers (38.09) greater than adhoc (33.62) teachers. This suggests that permanent teachers are using more of coping strategies to cope with their stress and thus, are experiencing lesser occupational stress in comparison to adhoc teachers.
While the t-test results of science and art secondary school teachers do not differ significantly in their occupational stress scores as the values of t-test applied are found to be insignificant at both levels (0.05 and 0.01 level). Both arts and science stream teachers have to deal with similar occupational situations and environment. Thus, subject streams are not a factor causing occupational stress in the selected secondary school teachers. Findings of the study by [11] also confirm similar results. Similarly the t-value for the coping strategies for science and arts teachers is found to be insignificant suggesting that both science and arts teachers adopt almost same level of coping strategies to cope with stress.

**Table 2. Occupational Stress vs Coping Strategies among Secondary School Teachers: Regression Model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient (β)</th>
<th>t-value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping Strategies</td>
<td>-0.551</td>
<td>9.296</td>
<td>.000</td>
</tr>
</tbody>
</table>

$R^2 = .304$
$Adjusted R^2 = .300$
$F. Change = 86.42^{**}$

In order to examine cause and effect relationship between occupational stress and coping strategies, a linear regression model was constructed by taking job stress as dependant variable and coping strategies as independent variable. Results depicted in Table 2 highlighted that coping strategies are found to be significant ($\beta = -0.551, p<0.01$) with negative regression coefficient indicating reverse relationship with occupational stress. This means more the use of coping strategies lesser will be the occupational stress being experienced by secondary school teachers of Hoshiarpur district.

CONCLUSIONS
The results of the study draw following major conclusions:
- Secondary school teachers moderately use coping strategies to relieve their stress.
- There exists no significant difference in coping strategies used by secondary school teachers in relation to gender and results show that male and female secondary school teachers are using same level of coping strategies to get rid of stress.
- There exists no significant difference in coping strategies used by secondary school teachers in relation to subject stream. In simple words science and arts secondary school teachers are using same level of coping strategies in order to manage their stress.
- Secondary school teachers moderately use coping strategies to relieve their stress.
- There exists significant difference in coping strategies used by secondary school teachers in relation to nature of job. Permanent secondary school teachers are using more coping strategies as compared to adhoc secondary school teachers.
- There exists negative relationship between occupational stress and coping strategies among secondary school teachers which means that more the use of coping strategies, lesser is the occupational stress being experienced by secondary school teachers.

EDUCATIONAL IMPLICATIONS
Stress among teachers has become an inescapable issue which if not managed properly can lead to distress or burnout. Consequently their physical and mental well being will be affected as well as will lead to detrimental impact on their performance and personality. In order to prevent them from dire consequences of stress they must be trained to cope with it through exercise, meditation, walking, listening to music, yoga, social networking, etc. The policy makers, stake holders, educationists, administrators,
managements must provide congenial working environments, less work load, job securities, maximum provision of facilities, etc. Teachers need to be involved in skill development programmes focused on emotional intelligence, time management, positive thinking, sharing of feelings, problem solving, cognitive training, etc. Relaxation techniques along with auto suggestions also relieve stress thus, bringing out courage and confidence in teachers as well as students. Therefore, these programmes and strategies should be implemented in training and professional growth courses.

The study can be extended to larger sample of teachers teaching at primary (aided, private, government) level and tertiary level along with age, socio-economic status, qualification, length of service, pay scale, teaching experience, etc. Other professions can also be considered such as managers, doctors, lawyers, businessmen, clerks, labourers etc.

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