

Chapter 3

Research Methodology

3.1 Introduction

Kyriacou (2001) defined teachers stress: the experience of teachers of unpleasant, such as anger, anxiety, tension, frustration, depression, resulting from some aspect of their work as a teacher. (p28). Impact of stress has the possibility of reducing ones performance at work and in the case of the teachers it lowers the quality of teaching in the schools. There are three major approaches to understanding the nature of stress in teaching: The first, based on the "engineering" model of stress, looks at the pressures exerted on teachers in schools. It presents stress as the load or demand placed upon a person which exceeds the elastic limit of the individual's capacity to adapt to it. The second, on the "medical" model, focuses on the teacher's psychological and physiological responses, which can arise as a consequence of stress. The third approach, based on the "interactive" model of stress perceives stress as interactive and situational. It recognizes that on the one hand teaching as profession and some schools in particular may exert pressures on teachers; while on the other, individual teachers react in different ways and bring a variety of adaptive resources to help them cope with those pressures. However, teachers are portrayed as those who are no longer at the mercy of external pressures.

Kyriacou and Sutcliffe, 1977b, Kyriacou, 1980d, 1986b; Dunham 1984b, all attributed the major causes of teachers stress as : pupils failure to work or behave, poor working conditions, generally in terms of relations and colleagues, workload, in terms of overload, under load, routine work and poor school ethos. Teachers are also stressed by personal factors, which are a major source of stress arising from individual differences in vulnerability to the impact of the stressors.

Teaching can be one of the most stressful professions. The daily interactions with students and their coworkers and the never-ending and uneven demands of teaching often lead to overwhelming pressures and challenges, which may lead to stress. As far

as the work stress is involved, some negative physiological, psychological, and behavioral consequences may result. The psychological factors affecting stress in general are identified which include anticipation, worry, feeling of helplessness, and responsibility. Teaching has not only considered as a difficult task but it also involves hard work; hence leading to more stress. Pressures arising from the school, inadequate and insufficient administrative support, poor working conditions, lack of participation in school decision making, the burden of daily work, and lack of resources have all been identified as factors that can cause stress among the teachers.

3.2 Method and Design of the Study

In order to study the stress among the primary and secondary teachers of Sikkim, the researcher adopted both quantitative and qualitative approaches. For the qualitative approach, the researcher employed the descriptive statistical method. The descriptive method focuses on the prevailing conditions or relationships that exist and the processes involved.

The study compared the findings of both the quantitative and qualitative approaches to arrive at conclusions. Combining both quantitative and qualitative approaches, it was believed, would also bring out new aspects, which were generally overlooked by other researchers.

The following Demographic variables and their categories are used for quantitative analysis.

Individual characteristics

Independent Variables	1. Age (in years)	2. Sex	3. Marital Status	4. Annual family income (in rupees)
Classification groupings	1. 20 – 29 2. 30 – 39 3. 40 – 49 4. 50 & +	1. Male 2. Female	1. Married 2. Unmarried	1. 50000-75000 2. 75000-100000 3. 100000-125000 4. 125000-150000 5. 150000-200000

Professional Aspects

Independent Variables	1. Educational Qualifications	2. Level of Teaching	3. Years of Teaching Experience
Classification groupings	1. SSC 2. HSC 3. Graduates 4. Postgraduates	1. Primary 2. Secondary	1. 0 – 5 2. 5 – 9 3. 10 – 20 4. 20 and above

Situational Variables

Independent Variables	1. Sector	2. District of Teaching
Classification groupings	1. Private 2. Public	1. East 2. West 3. North 4. South

The locale for the present study was the state of Sikkim in North East of India. For the purpose of this study, the target population comprised of the teachers working in formal educational institutions in the state of Sikkim.

3.3 Nature and Size of Sample

For the purpose of data collection for this study, the researcher employed the Stratified Random Sampling Technique. The criteria for stratification were Geographical location – district – sector – public or private – and, level of teaching – primary or secondary. Initially stratification criterion was used for selecting the number of teachers from the various levels. An attempt was made to take 5% of the total number of teachers in primary and secondary schools in both private and public schools in each of the four districts.

Out of the sample of 572 teachers the questionnaires returned by 24 teachers had to be discarded as they were incomplete. Therefore, the final sample consisted of 548 teachers. The final sample, thus obtained, is tabulated in terms of the demographic variables shown in tables 3.1 to 3.8. The demographic analysis was based on the variables: age, sex, marital status, annual family income, educational qualifications,

years of teaching experience, level of teaching, type of the institution and district of teaching.

For collecting data from the subjects, the heads of the institutions were contacted and permission to obtain the data was sought. The researcher built a rapport with the teachers in order to get maximum cooperation and handed over the tools personally in most of the institutions. Instructions regarding filing of the tools were given, wherever necessary. The questionnaires were distributed to the teachers with a request to return them early. Some institutions gave cooperation to the researcher by giving time to administer the tools personally and get them filled-in. In order to maximize the rate of return of the questionnaires, the researcher also contacted a few teachers from these institutions individually, built a rapport with them and requested them to get their friends to fill-in the tools. Some of the school teachers were very cooperative but a few of the school teachers did not give the duly filled-in tools back in spite of repeated visits.

3.4 Profile of Respondents

Given below is the distribution of responding teachers according to their age.

Table 3.1: Distribution of Sample of Teachers According to Age

Age	Frequency	Percent	Cumulative Percent
1 20-29 yrs	164	29.9	29.9
2 30-39 yrs	194	35.4	65.3
3 40 + yrs	190	34.7	100.0
Total	548	100.0	

It can be seen that the respondents are distributed in each of the three age groups almost equally. There were 164 respondent teachers in the 20 – 29 age group, 194 in the 30 – 39 age group and 190 who were above 39 years of age. Percentage wise nearly thirty per cent were in the 20 – 29 age group, while nearly 35 per cent each were in the other two age groups.

The male / female distribution of responding teachers is given below:

Table 3.2: Distribution of Sample of Teachers According to Sex

Sex	Frequency	Percent	Cumulative Percent
1 Male	275	50.2	50.2
2 Female	273	49.8	100.0
Total	548	100.0	

The male and female distribution of sample of teachers was almost equal. There were two hundred and seventy five males accounting for 50.2 per cent of the total sample and two hundred and seventy three female teachers accounting for 49.8 per cent of the total sample.

The table below gives the distribution of sample teachers according to their marital status.

Table 3.3: Distribution of Sample of Teachers According to Marital Status

Marital status	Frequency	Percent	Cumulative Percent
1 Married	376	68.6	68.6
2 Unmarried	172	31.4	100.0
Total	548	100.0	

The number of married teachers was three hundred and seventy six and unmarried teachers were one hundred and seventy two. The married teachers accounted for little more than two-thirds of the total number of sample of teachers while unmarried ones were a little less than one-third of the total number of respondents.

Distribution of sample of teachers according to their annual family income is given below.

Table 3.4: Distribution of Sample of Teachers According to their Annual Family Income

Annual family income	Frequency	Percent	Cumulative Percent
1 Rs. 50000-75000	144	26.3	26.3
2 Rs. 75000-100000	116	21.2	47.4
3 Rs. 100000-125000	108	19.7	67.2
4 Rs. 125000-150000	76	13.9	81.0
5 Rs. 150000-200000	104	19.0	100.0
Total	548	100.0	

There were 144 persons with an annual family income of less than Rs. 75,000, 116 people in the annual income range of 75 thousand to 1 lakh, 108 persons with income between 1 lakh to 1.25 lakhs, 76 persons in the income range of 1.25 lakhs to 1.5 lakhs and 104 persons with an annual income between 1.5 lakhs to 2 lakhs. Over one-fourth of the people had income less than 75 thousands per year. The percentage distribution of teachers in the other income brackets was approximately 20 per cent each except in the income group of 1.25 – 1.5 lakhs, which was about fourteen percent.

The distribution of the sample of teachers according to their educational qualifications is given below.

Table 3.5: Distribution of Sample of Teachers According to their Educational Qualifications

Educational Qualification	Frequency	Percent	Cumulative Percent
1 Xth Std.	34	6.2	6.2
2 XIIth Std.	122	22.3	28.5
3 Graduate	232	42.3	70.8
4 Post Graduate	151	27.6	98.4
5 Others	9	1.6	100.0
Total	548	100.0	

The maximum educational qualifications of 34 teachers was 10th standard, of 122 teachers was 12th standard, while 232 teachers were graduates. 151 teachers had post graduate qualifications and 9 teachers had other educational qualifications. There were six percent teachers with 10th standard qualification, 22 percent with 12th standard qualification, 42 per cent with graduate level qualifications, 28 percent with post graduate qualifications. The percentage of teachers with other qualifications was less than 2 per cent.

The following table gives the distribution of sample of teachers according to their level of teaching.

Table 3.6: Distribution of Sample of Teachers According to their Level of Teaching

Level of teaching	Frequency	Percent	Cumulative Percent
1 Primary	176	32.1	32.1
2 Secondary	372	67.9	100.0
Total	548	100.0	

As can be seen from the table there one hundred and seventy six teachers who were teaching at the primary level and three hundred and seventy two teachers teaching at the secondary level. The number of teachers teaching at the primary level was little less than one-third and the number of teachers teaching at the secondary level was a little more than two-thirds.

The following table gives the distribution of the responding teachers according to their years of teaching experience.

Table 3.7: Distribution of Teachers According to their years of Teaching

Years of teaching	Frequency	Percent	Cumulative Percent
< 5 years	197	35.95	35.95
6-10 yrs	134	24.25	60.20
> 10 years	217	39.60	100.00
Total	548	100.00	

As can be seen from the above table there were 197 responding teachers with 5 or less years of teaching experience, 134 teachers with 6 to 10 years of teaching experience and 217 teachers with 10 or more years of teaching experience.

The following table gives the distribution of the responding teachers according to the sector in which they are working.

Table 3.8: Distribution of Sample of Teachers According to Sector of Teaching

Sector	Frequency	Percent	Cumulative Percent
1 Govt.	351	64.1	64.1
2 Private	197	35.9	100.0
Total	548	100.0	

A total of five hundred and forty eight teachers from both the government and private schools returned the questionnaires duly filled. Among these three hundred and fifty one were from government institutions and one hundred and ninety seven were from private institutions. Approximately sixty four percent were from government schools and thirty six per cent were from private schools.

The number of responding teachers according to the district in which they are teaching is given in the following table.

Table 3.9: Distribution of Sample of Teachers According to District of Teaching

District	Frequency	Percent	Cumulative Percent
1 East	290	52.9	52.9
2 West	75	13.7	66.6
3 South	96	17.5	84.1
4 North	87	15.9	100.0
Total	548	100.0	

Among the duly filled in questionnaires two hundred and ninety were from East district, seventy five from West district, ninety six from South district and eighty seven were from North district. Over half the respondents came from the East district whereas the respondents were around fifteen percent each from the other three districts, that is, from West, South and North districts.

3.5 Results of Pilot study:

The Questionnaire was distributed to a sample of 20 primary and 20 secondary school teachers. The method of filling the questionnaire, time taken, difficulties faced by them were observed. Accordingly some changes were made and the final questionnaire was prepared.

3.6 Analysis of Data

The questionnaire consisted of 5 parts. They are: Level of occupational stress, Functional job stress, Physical, Psychological and Social Stress symptoms inventory, Stress resistant cognitive behavior patterns Job anxiety scale and Copying strategies.

Occupational stress index is the first part of the questionnaire. The scale assesses the extent of stress, employees experience in the context of their job life. The respondents were asked to select any one of the five alternative responses to indicate the extent of accuracy to which each statement describes the nature and conditions at their job and their experiences and feelings about various aspects of their job life. To estimate the level of their occupational stress the scores on all the statements were added up. The statements with asterisk were scored inversely, e.g., 5 for absolutely false and 1 for absolutely true. If the score was below one-third of the total maximum possible scores then the respondent is considered to be having low stress, if between one-third and two-thirds, then medium stress and if above two-third, high occupational stress.

Functional Job stress scale – Part II – assesses the extent of job stress which is caused from demanding but desirable job situations. Employees react to these situations with positive affect. The respondents were asked to choose any one of the five alternative responses for each of the statements to indicate the extent to which they are true in their case. To estimate the level of their functional job stress the scores on all the statements were added up. If the score was below one-third of the total maximum possible scores then the respondent is considered to be having low functional job stress, if between one-third and two-thirds, then medium functional job stress and if above two-third, high functional job stress.

Stress Symptoms Inventory – Part III – comprises common physical, psychological and social relational symptoms, which people manifest when they are under stress. Respondents were asked to rate these symptoms on five point scale to indicate how frequently they experienced these symptoms in the past one month. To estimate the level of their symptoms the scores on all the statements were added up. If the score

was below one-third of the total maximum possible scores then the respondent is considered to be showing low symptoms, if between one-third and two-thirds, then medium symptoms and if above two-third, high symptoms.

Stress Resistant Cognitive Behavioral Patterns Scale – Part IV - assesses the extent of those cognitive and behavioral patterns, which prevent or moderate the experience of stress in day-to-day life and reactions to them. The respondents were asked to choose one of the five alternative responses to indicate how far these statements resemble their cognitive and behavioral orientations. . To estimate their resistance to stress, the scores on all the statements were added up. If the score was below one-third of the total maximum possible scores then the respondent is considered to be showing low resistance, if between one-third and two-thirds, then medium resistance and if above two-third, high resistance to stress.

Coping Strategies Scale – Part V – assesses the extent to which people use various strategies - such as approach, avoidance, cognitive and combination of the three – to deal with the stressful situations in their day-to-day life. The respondents were asked to choose any of the five alternative responses for each coping strategy to indicate the frequency of their use in their dealing with the stressful situations. To estimate their overall coping to stress, the scores on all the statements were added up. If the score was below one-third of the total maximum possible scores then the respondent is considered to be showing low coping, if between one-third and two-thirds, then medium coping and if above two-third, high coping to stress.