ANALYSIS OF COPING STRATEGIES IN THE FACE OF OCCUPATIONAL HAZARDS - A STUDY OF WHITE COLLAR EMPLOYEES OF EDUCATION SECTOR IN WEST BENGAL (INDIA)

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In

MANAGEMENT

BY

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THESIS COMPLETION CERTIFICATE

This is to certify that the thesis "Analysis of Coping Strategies in the face of Occupational Hazards - A study of white collar employees of education sector in West Bengal (India) submitted" by Rupsha Roy in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy is an original work carried out by her under our joint guidance. It is certified that the work has not been submitted anywhere else for the award of any other Degree or Diploma of this or any other University. We also certify that she complied with the plagiarism guidelines of the University.

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DECLARATION OF AUTHORSHIP

I declare that this research thesis titled "Analysis of coping strategies in the face of occupational hazards - A study of white collar employees of education sector in West Bengal (India) ", submitted by me in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy in Management by the ICFAI University, Jharkhand, Ranchi is my own work. It contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgement has been made in the text. I further state that I complied with the plagiarism guidelines of the University, while preparing the thesis.

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PREFACE

The research presented in this thesis identifies various occupational hazards, sources of these hazards and also the coping strategies adopted by the employees of the education sector. It also tries to priotises the sources of the hazards with respect to the escalation of the impact of the occupational hazards on the employees. In this research the coping strategies are analysed on the basis of the parameters that are influencing the employees to adopt a particular coping strategy.

Objective of the Research Study:

Most of the studies in the sector of occupational hazards have been studied with respect to the manufacturing sector. Very few have been studied on the service sector. At least in India the studies in education sector are very few as a result the health and safety of the academia group is very negligible. West Bengal being the centre of excellence in academia have very renowned educational institutes, this research aims to fulfill the following objectives:

Objective 1. To provide the general background to the discussion on occupational hazards faced by the employee working in white collar jobs in the Educational sector in West Bengal.

Objective 2. To review and summarize the impacts of these occupational hazards on the employee's working in the education sector of West Bengal.

Objective 3. To identify the factors causing occupational hazards to the employees in the education sector.

Objective 4. To identify and prioritize the sources of these occupational hazards.

Objective 5. To analyse the coping strategies adopted to cope with the occupational hazards of the education sector.

Objective 6. To analyse the factors influencing the coping strategies of the employees facing the occupational hazards in the education sector.

THESIS LAYOUT

The research thesis has 7 chapters starting with Chapter 1 introducing the concepts used in the research along with the current scenario of the employees of the education sector. The definition of the terms like occupational hazard, coping strategy, education sector and white collar jobs are also explained with their references in this chapter.

Chapter 2 gives the detailed information of the West Bengal Education Sector. The Chapter 3 presents the survey of literature and the description of the tools utilized for this research. Chapter 4 describes the objective and hypothesis of the research.

Chapter 5 elaborates on the research methodology, giving detailed information about the population of the research along with the sample studied. Description of the various tools like MBTI and CSI that are used for the purpose of fulfilling the objective of the research is given in this chapter. This chapter also presents the reliability and validity information of the tools used in this research.

Chapter 6 focuses on analysis and interpretation of the data gathered in this research along with the statistical tools used to test the hypothesizes formulated for the purpose of fulfilling the objectives of the research.

Chapter 7 presents the findings, conclusions, recommendations, limitations and the scope of the research.

EXECUTIVE SUMMARY

Working in education sector education sector has traditionally been regarded as low hazardous occupation. This concept has made a huge migration of employees from other corporate to the education sector. To some extent in the historical point of view this idea could be considered as true, but it is not so with the modern education system. Drawing on a considerable body of empirical evidences it is argued that during the past decades hazards in the education sectors have a tendency to increase in all continents. It is generally agreed that one of the most common determinants of these hazards are the increasing demand of the employees in the education sector**.**

The research has been motivated by teachers, administrators and researchers working in the educational sector to help the policy makers make policies for the betterment of the living standards of the employees and also improve the quality of imparting education in India. But for several reasons the researches on the occupational hazards and coping strategies did not progress much in the educational sector of India.

An extensive literature review has been carried out in the areas of occupational hazards in education sector, sources of the occupational hazards, overview of education sector of West Bengal, Myers-Briggs type indicator and Coping Strategy Inventory published in International and National journals to identify the research gaps, which are absence of the study of other hazards apart from

occupational stress in education sector, absence of studies leading to the factors influencing the coping strategies for these occupational hazards and identifying the most significant sources causing these hazards in the education sector of West Bengal. Research objective emanated from the research problem statement are:

1. To provide the general background to the discussion on occupational hazards faced by the employee working in white collar jobs in the Educational sector in West Bengal.
2. To review and summarize the impacts of these occupational hazards on the employee's working in the education sector of West Bengal.
3. To identify the factors causing occupational hazards to the employees in the education sector.
4. To identify and prioritize the sources of these occupational hazards.
5. To analyse the coping strategies adopted to cope with the occupational hazards of the education sector.
6. To analyse the factors influencing the coping strategies of the employees facing the occupational hazards in the education sector.

In order to achieve these objectives a set of 22 hypotheses have been formulated for this study and tested. The research hypothesis are categorised in three groups.

The **First group** deals with the impact of occupational hazard among different age groups, gender, marital status, educational level, earning status, working modes, working experience, different organisations, different funding

agencies, respondents occupying different positions in the organisation and different personality traits.

The **Second Group** tries to investigate the significant predictors of the impact of occupational hazards.

The **Third group** deals with variables influencing the different coping strategies.

Research methodology that is followed is of the type mixed research design in terms of both qualitative and quantitative research design approach has been adopted for achieving the objective of the research. The research design is divided into two phases. Initially the qualitative research method is adopted to identify the hazards, sources of hazards, coping strategies and factors influencing the coping strategies amongst the respondents working in the education sector of West Bengal with the help of "the public voice". This phase has been utilized to identify the concepts to develop a conceptual framework. The qualitative research is used as a precursor to quantitative method used in phase – 2.

The concepts evolved from the phase – 1 were utilized in developing a questionnaire for testing the conceptual framework so evolved. The questionnaire consists of eight sections. These eight sections are to capture data of demographic details of the respondent, occupational information of the respondent, personality trait identification, impact of occupational hazard, sources of occupational hazard, stakeholder related information, task related information and coping strategy questionnaire.

The sampling design comprised of data that is used for this research is collected in two phases.

First phase is the qualitative data, which is collected with the help of unstructured interview of respondents who faced and agreed to participate in this research, provided their identity is not disclosed.

The second phase of data was collected from the population of the academicians in whole of West Bengal belonging to 15 universities, 10 colleges, 5 professional institutes and 10 Schools. A total of 1664 respondents were approached by sending them the questionnaire through online method using the online tool (survey monkey), out of which 567 people have responded. Among these 567 respondents 286 respondents have responded the questionnaire in full. The rest responded in partial and has to be eliminated from analysis. The researcher has personally administered to 80 respondents and collected the data by convenient sampling. Hence the total sample size is 358.

The research instrument used is a well designed questionnaire for converting the qualitative data into quantitative. Two very popular instruments like the Myers-Briggs Type Indicator (MBTI) instrument and the Coping Strategy Inventory (CSI) instrument are used. The MBTI instrument is used to analyse the personality trait of the respondent and the CSI instrument is used to analyse the coping strategies adopted by the respondents when faced with occupational hazard.

The primary data collected from respondents was edited, coded and analyzed using IBM SPSS 20.0 software. Pilot survey data is analysed for corrections and modifications of the questionnaire. Data Analysis is presented in two sections. Section – I deals with Qualitative Data Analysis and Section – II deals with Quantitative Data Analysis.

Out of the total 22 hypotheses, 11 were tested using ANOVA test while the remaining 11 were tested through linear regression analysis. Out of the 11 hypothesis 7 hypotheses were retained since their significant value was below the cutoff value of 0.05. Three exploratory factor analysis was performed on the 13 scale items of the sources of occupational hazards, 24 scale items of stakeholder related concepts and 7 scale items of task related concepts. Two linear equations were obtained for predicting the impact of occupational hazard. The first linear equation is to predict the impact of occupational hazard with the demographic and organisational variables. The second linear equation is used to predict the impact of occupational hazard with the factors of sources of occupational hazards, stakeholder concepts and task concepts.

Exploratory Factor Analysis was performed on 13 scale items of the sources of occupational hazards since multi co linearity existed in the 13 scale items. The variables were transformed into uncorrelated variables using Principal Component Analysis (PCA). To yield factors orthogonal rotation was selected. The final solution had no correlation amongst them. An Eigen value was used for final factor extraction. The sum of variances of factor values should be greater than one and that the factor structure should be meaningful, useful and

conceptually sound. Accordingly four factors like entity interface, work structure, campus work environment and the policies.

Exploratory Factor Analysis was performed on 24 scale items of the stakeholder related concept, since multi co linearity existed in the 24 scale items. The variables were transformed into uncorrelated variables using Principal Component Analysis (PCA). To yield factors orthogonal rotation was selected. The final solution had no correlation amongst them. An Eigen value was used for final factor extraction. The sum of variances of factor values should be greater than one and that the factor structure should be meaningful, useful and conceptually sound. Accordingly six factors like transparency in organisation, stakeholder administrative issues, and stakeholder interface, stakeholder policies, student control and parent control.

Exploratory Factor Analysis was performed on 7 scale items of the task concept. Since multi co linearity existed in the 7 scale items. The variables were transformed into uncorrelated variables using Principal Component Analysis (PCA). To yield factors orthogonal rotation was selected. The final solution had no correlation amongst them. An Eigen value was used for final factor extraction. The sum of variances of factor values should be greater than one and that the factor structure should be meaningful, useful and conceptually sound. Accordingly 3 factors like task control, task density and task conflict.

The research findings are divided into qualitative data analysis findings and quantitative data analysis findings. These findings are explained below:-

Qualitative data analysis Findings:

The first research question was about the existence to the hazard among the employees of the education sector. On the basis of the in-depth interview it is very clear that the employees working in the education sector of West Bengal are not free from the perils of dangers in the occupation. Though the maximum employees speak of the common hazards like occupational stress, still the other hazards are burnout, musculo-skeletal disorder, and false accusation. It was also found that the musculo-skeletal disorder was found more in primary and secondary schools of West Bengal which are mostly run by the government of West Bengal.

The second research question was to know what could be the factors of the hazards. The sources of these hazards as perceived by the employees working in the education sector are due to no proper organisational or governmental policies. The management culture or the work culture is also not very amicable and comfortable. These factors also aggravate the hazards. Another main source of the hazard is the job itself. Today the job descriptions of the employees who are working in the education sector are very much different from what it was earlier. The jobs are not just limited to academics like teaching, evaluating, assessing and managing the classes. All the activities not only eat into their time but also keep them into high pressures both physically as well as mentally. This creates lots of stress in an individual. Moreover in West Bengal campus violence is quite a common phenomenon. The sources for the campus violence can be attributed to many reasons. The source for false accusations could be attributed to organisational politics, difficult teacher

– parent relationships etc. Apart from the above mentioned sources the other sources are stakeholder related concepts and task related concepts. The stakeholder related concepts are stakeholder multiplicity, stakeholder complexity, and stakeholder interface and stakeholder administration. The task related concepts are task complexity, task ambiguity and task description.

To the question how these hazards have impacted the majority of the respondents answered that they had to take the help of medication due to the stress that incurred in their jobs. Many respondents also complained of sleeplessness, boredom and also losing interest in their jobs. Few respondents also complained of the damage that occurred in the relationship with their colleagues. Few respondents also pointed out on not being able to balance between their work life and their home life.

The next research question was to how to cope with these hazards. To this the respondents had a view of adopting multiple coping strategies based on the phases of the hazards. According to the respondents in the initial phase of the hazard they normally adopted emotion focused strategy or avoidance strategies. Some respondents even tried the self-criticism strategies. Few of them tried to adopt humour strategies to decrease the intensity of the hazard. But as the intensity of the hazard starts increasing some respondents tend to lose their patience. This made them adopt the confronting strategies. In spite of adopting these strategies if the hazard gets aggravated respondents complained of lot of health related problems like losing appetite, sleeplessness, nightmares, headaches and fatigues. In this phase of the hazard most respondents spoke of social support as the common coping mechanism

adopted by them. They even tried to adopt problem focused strategy like seeking support of their higher authorities, management, supervisors and colleagues. When the impact of the hazard was extensive and respondents felt totally helpless and unable to cope with the hazard they tried to adopt the withdrawal strategy or attacking strategy. The withdrawal strategy was in the form of taking more of sick leaves, avoiding few tasks, coming late to workplace or intentionally leaving early. When none of the strategies worked then the respondents aimed to end the hazard by quitting like resigning, requesting for transfer to different location, department or branch.

The final research question was to analyse the factors that influence the employees to adopt a coping strategy. To this all the respondents answered that their personality and their experience helped them to adopt any particular strategy.

Based on the findings from qualitative analysis we can form the following theories:

1. Stake holder related concepts, task related concepts, organisational policies, organisational culture, management issues, job related variables like job profile, job security etc, relationship with parents, student handling and control process all contribute to escalate the occupational hazards among the employees of the education sector of West Bengal.
2. The hazards impact the employees both physically and mentally. Physically by causing damage to their health and body and mentally by

making them too loose interest in their jobs, causing boredom and fatigue impacting their performance and quality of work life.

3. To cope with these hazards the employees adopt various strategies like emotion focused, problem focused, self criticism, social withdrawal, seeking support and if they can't cope then they exit either by resigning or re-locating themselves from the place of hazard.
4. To adopt any coping mechanism the employee's personality trait and their experience in their jobs influences a lot.

Quantitative data analysis Findings:

The theories formed from the findings of the qualitative phase are tested through the help of a questionnaire and collecting primary data with his questionnaire. The findings that emerged from the quantitative data analysis are as follows:

Initially the impact of occupational hazard was analysed with the demographic variables like gender, age group, marital status, educational level and earning status. On analysis with these variables the following findings were obtained:

1. The impact of occupational hazard is not significantly different for male or female employees. It means that the impact is same as to making them exhausted sleepless, losing appetite and sometimes even have to take the help of medicines.
2. When it comes to the various age groups it has been confirmed that the impact has a significant difference when the employees belong to different age groups. The employees belonging to higher age groups

are impacted by the hazards more than those belonging to lower age groups.

3. The marital status has no influence when it comes to the impact of the hazards on the respondents.
4. In the case of the educational level of the respondents it was found from the data that the higher the education level the higher is the impact.
5. When the earning status of the employees with respect to whether they were the sole earners or shared earners was analysed in context to impact of occupational hazard it was found from the data that there was a significant difference in the impact of the hazard on the individual with respect to their earning status. It was found that the impact was quite higher for respondents who were sole earners. Where as in case of shared earners the impact was less. The impact of the occupational hazard after being analysed with the demographic variable were analysed with organisational variables like academic experience, mode of working, type or category of the organisation in which the respondents are working, the type of funding mode of the organisation, and also the position held by the respondents in their organisation. The findings obtained by this analysis are as follows:-
    1. The analysis showed that the impact of the hazard has significant difference among the respondents with different groups of academic experience. The higher the academic experience the higher is the impact.

2. The analysis of the Impact of occupational hazard with respect to the working mode of the employees revealed a significant difference in case of employees who are permanently employed than who are temporarily employed. It has been found from the data that the employees who are permanently employed are having high potential of impact compared to temporary employees. As the temporary employees are quite free to avoid the unpleasant situations in their jobs either by changing the organisation or by remaining away from the situation.
3. The analysis or the impact of the hazard with respect to the organisation type revealed that there is significant difference in the impact of the hazard of different organisation categories. In West Bengal the hazard is near to negligible in case of primary schools and secondary schools. Professors, Associate Professors and Assistant Professors are entrusted with clerical duties like maintenance of attendance records, defaulter's list, evaluation data, assessment data etc, administrative work, social work, counseling, mentoring, participation in conferences and workshops, paper publications, paper corrections, handling examinations, working with students in their projects and also in private colleges additional responsibility is given to the professors to get students a type of marketing job also. Targets are there for all these activities and pressure is also given on them for these activities.
4. The data analysis has also revealed a significant difference in the impact of the hazard based on the funding agency of the

organisations. In West Bengal there are both private and public players in the organisations belonging to the educational sector. The school is run by both state government and private organisations. Even in case of universities in West Bengal there are universities run by state government, private universities, deemed universities and also one university run by the central government. Hence the impacts of the hazards are different for organisations run by state government or private organisations.

5. There is significant difference in the means of the Impact of occupational hazards among the respondents working in different positions in the organisations. The data analysis in this perspective revealed that higher the position occupied is more prone to the hazard and hence the impact is also high. It is quite evident that employees who occupy higher positions in the organisations have more responsibilities and commitments to their jobs. Hence more the responsibility more prone to hazards likes stress and burnouts.

One more important finding that was observed from this study is that the personality trait that emerged as maximum number among the respondents is extroverted sensing thinking and judging in short it is abbreviated as ESTJ. Robert Heyward suggests in his personality page that ESTJ's when they deal with issues rationally and logically, their primary mode of living is focused externally. Whereas when they take things via their five senses in literal and concrete fashion, their secondary mode is internal.

The next emerging personality trait is introverted sensing thinking and judging in short it is abbreviated as ISTJ.

Various researchers have suggested that the careers chosen by people belonging to ESTJ personality types are Law, Human Resources, and Training, nursing, management, project management and administration. Careers chosen by most of people with personality traits of ISTJ are medical, science, engineering, analysis, accountancy, academia, law, computing, and project management.

On analysis of the demographic variables and organisation variable the analysis focuses on the sources of the hazards. Three groups of sources were identified. They are individual and organisational sources, stakeholder related sources and task related sources.

The research started with 13 variables of individual and organisational sources, 24 variables of stakeholder related sources and 7 variables of task related sources. On applying correlation among these variables it was found that there was multi-co linearity problem among the variables. So to reduce the number of variables, factor analysis was done. The factor analysis reduced individual and organisational variables into 4 factors, stakeholder related variables into 6 factors and task related variables into 3 factors. So the research identified a total of (7 + 4 + 3) 14 factors as sources of the hazards in the education sector of West Bengal. These 14 factors are entity interface, work structure, work environment, policies, and transparency in organisation, stakeholder administrative issues, stakeholder interface, stakeholder policies, student control, parent control, task control, task density and task conflict.

These 14 factors were then analysed using a linear regression model. The model derived the significant sources for the hazards as task conflict, task control, student control, stakeholder interface, transparency in organisation and work environment. Hence these sources have a great role to play in either escalation or de-escalation of the hazards.

After the analysis of occupational hazard and the sources of the occupational hazard we now focus on the coping strategies adopted by the personnel to cope with the hazards. A very interesting finding in this case is that the coping strategies that are adopted by the individual to cope with the occupational hazard are a combination of multiple coping strategies. As per the theory of Niedl (1996), Zapf and Gross (2001) the individuals adopt avoidance strategies in the beginning of the hazards. But the finding of this study says that most of the individuals adapt to the problem focused strategies. As per the descriptive statistics the coping strategies with the highest to the lowest means are in the order of problem solving, cognitive restructuring, social support, express emotion, wishful thinking, social withdrawal, problem avoidance, political and self criticism respectively. Coping strategies are basically a conscious effort to solve problems of both personal and inter-personal nature to overcome, minimize or tolerate any hazards like stress or conflict. As per various researches the two main types of coping strategies are emotion and problem focused coping.

The person adapting emotion focused coping changes their emotional response to stressors. The coping techniques that are focused on reducing the negative emotional responses, an individual might experience because of stressors are

emotional focused coping. Normally the common behaviors that are visible in the case are like letting off steam by venting to friends and family, to keep the mind away from the stressors they try to keep themselves busy, also tries to seek encouragement, moral support, sympathy and understanding from others, turning to rigorous activities like sports to distract attention from stressors etc. When People don't think that their actions can affect the stressor itself they try to alter their response to the stressor are more likely to adopt emotion focused coping. Coping strategies belonging to the group of emotion focused strategies include express emotion, social support, self criticism and social withdrawal.

To avoid the stress responses the stressors are causing individuals try to adapt to deal with the stressors. This involves finding out the practical ways to deal with hazardous situations. Some behaviour administered by individuals who adopt this coping strategy include put other activities on hold in order to concentrate and cope with the hazards, actively try to remove or work around the stressor, wait to act until the appropriate time, seek concrete advice, assistance and information etc. This coping method is more common when individuals believe that the action can affect the stressor. Coping strategies belonging to the group of problem focused strategies include problem solving, cognitive Restructuring, problem avoidance, wishful thinking and political.

After understanding the coping strategies adopted by the individuals the next analysis was to find the demographic and organisational factors which are influencing the employee to adopt the particular coping strategy.

On analysis of the demographic variables with the coping strategies it was found that the variables like gender, age group and educational level of the

employees are significantly associated with the coping strategies. To analyse individually gender is significantly associated with the coping strategy of self criticism only. Age group of the employees is significantly associated with coping strategies like problem solving, cognitive restructuring, express emotion, problem avoidance and self criticism. Educational level is significantly associated with all the nine coping strategies. Hence we can say that the factors which enable an individual to adopt a particular coping strategy are employee's age and their educational level. Many relations between personality and coping were stronger in older samples.

On analysis of organisational variable with coping strategies it was found that the variables like organisation type, the funding agency of the organisation and the position held by the employees are significantly associated with the coping strategy adopted by them. Out of these three variables the organisation type is significantly associated with only one coping strategy that is wishful thinking. The other two variables like funding agency of the organisation and the position held by the individual is significantly associated with all the nine coping strategies.

Many researchers have supported the theory that individuals who were post graduates, individuals who were in the position of head of the department or organisation and individuals with greater work experience adopted the problem focused coping strategies to a greater extent. Another research also stressed on the fact that the female employees adopted emotion focused strategies to a greater extent.

The study also revealed that the personality trait of an individual has a greater influence in the adoption of the coping strategy by the individual. Personality influences coping in many ways. Even prior to coping, personality influences the frequency of exposure to hazards and also the type of hazards experiences. We have from theories that neuroticism predicts exposure to interpersonal stress and tendencies to appraise events as highly threatening.

The research concludes that:-

1. Few of the hazards that are highlighted in this study are burnouts, campus violence, stress and false accusations. Among them majority spoke of burnout. According to the respondents the cause for the burnouts was due to job overload, meeting expectations of management and peers, students and their guardian's etc. The respondents working in schools spoke of musckulo-skeletal disorders (MSD) due to the board work and furniture's used in the schools. The major impacts of these hazards are physical health variables and psychological variables like fatigue, burnout etc.
2. The highest impact was on health and they had to take medicines for hypertensions etc. Most of the people complained of sleeplessness, exhaustion, and boredom and losing interest in the job. Few of them also complained that such unpleasant situations have damaged their relationships with their colleagues. According to self reporting the employees spoke of difficulties in maintaining work – home balance.
3. The respondents perceived of few factors causing the hazards, which can be grouped into three categories. They are general factors,

stakeholder related concepts and task related concepts. The factors belonging to the group of general categories are organisational policies, management issues, job profile, job security, organisational politics, and student handling, parents and outsiders interactions. The outsiders are political parties, community etc. The factors belonging to the stakeholder concepts are stakeholder multiplicity, interface, complexity, administration and operating paradigm. The task related concepts involve factors like task ambiguity, task complexity, task description and task control.

4. The most significant sources of the hazards are task conflict, task control, and student control, stakeholder interface and campus culture. Among these the highest in priority is in the order are stakeholder interfaces, task conflict, student control, and task control and campus culture.
5. The major and common coping strategies that are adopted by the employees of education sector were problem solving, cognitive restructuring, social support and express emotion. Though it was found from the study that an individual uses a combination of coping strategies to cope with unpleasant situations in their work, but few strategies that were mentioned above were commonly used by most of the employees to cope with their problems.
6. The qualitative analysis revealed that personality trait and experience in this sector has a major influence on the coping strategies. The quantitative analysis revealed that personality trait if the employee,

funding agency of the organisation, position held by the employee in the current organisation

Recommendations of this research are as follows:-

1. The research report highlights the major personality type the respondent's posses in the education sector. This information can be used to recruit the respondents in this sector.
2. The report also investigates the different occupational hazards and its impacts on the respondents facing them. This information can be used in induction training program to make the new recruits aware of the problems and consecutive solutions.
3. The research report also priotises the different sources which could predict the occupational hazards. This information can be used to de-escalate the impacts of the occupational hazard.
4. The knowledge of health hazards mentioned in this report could help the policy makers to focus on the health and safety issues of the respondents working in this sector.

This research contributes the knowledge of the existence of different hazards in the education sector and also its impacts on different respondents are different. Since education sector belongs to the service industry the results could be attributed with other sectors belonging to service industries like hospital, hotel, banks etc. The research also identifies that the variable which influence the adoptions of coping strategies. Respondents can be trained in adopting specific coping strategies for specific hazards to become successful in their career.

The research is limited to a very small sample of the respondents working in the education sector. As a result only one personality trait i.e. ESTJ was in majority. If the data would have been collected in huge it could have showed some more personality traits making the analysis rich in content. The language of the instrument being English major portion of respondents belonging to the education sector of West Bengal could not comprehend or understand the meaning. Hence a very large portion of the population could not be approached for the research. Also this limitation escalated the numbers of non-response or partially filled questionnaire. Cumulative character of the hazard develops the impact of the hazard very slowly and after a period of time. Hence many respondents' responses were not the exact impacts.

The quest for knowledge, solutions to problems and research questions leading to improved quality of life is synonymous with progress of human civilization. Whereas the current research provided answers to the research questions, it also highlighted its limitations in the previous section. These limitations can be removed on further research individually in different organisation types. The extension of this study can be made in other service sectors giving a huge scope to the researchers to study the service sectors.

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CHAPTER – 1

1. INTRODUCTION

1.1. OVERVIEW:

Education Scenario in West Bengal is in news always for reasons which are highly unacceptable to the culture and belief of the education sector of West Bengal. West Bengal is always considered as the cradle of Indian renaissance and national freedom movement. It is also considered as a land of intellectual awakening.

West Bengal is in fact the home, of four Nobel Laureates like Ronald Ross, Rabindranath Tagore, Mother Theresa and Amartya Sen and great scientists like Jagdish Chandra Bose. Bengal is credited for being the first to establish a University and Medical College based on western concepts. West Bengal is considered as the land of poet-philosopher Rabindranath Tagore, the land of great saint Swami Vivekananda, Bengal has a rare beauty steeped in culture and scholasticism where the past still looms over the present with the legacy still lingering on.

It is common knowledge that the province of Bengal, undivided till 1947, and then the state of West Bengal, has played a leading role in the country in spreading education at all levels, beginning with mass education and culminating in higher, professional and specialised education.

West Bengal's academic atmosphere is very much ideal for any types of intellectual pursuits and scientific quest. West Bengal is popular for its original ideas. But it is really unfortunate that this is vanishing very fast. We are now frequently hearing the stories of talents moving to other states, interference of political parties, mediocrity regimes, also standards going down, disrepair and deterioration of laboratories and classrooms as well as huge financial crisis in the education sector. Among all states the rank of Bengal with respect to the overall literacy rate, gross enrolment ratio, drop-out rates etc are dropping down quite vigorously. (Sarkar, 2004).

Very recently there are frequent recurrences of student's confrontation in educational institutes of West Bengal. Students have become quite disrespectful to teachers and do not hesitate to insult or injure them. To all this we can say that today's education in Bengal is suffocating. It lacks fresh thinking as to how to rejuvenate the sagging morale and spirit of the teaching community, students and their worried parents.

The past three decades has visualized the whole process of bagging an academic job and getting promotion through the standard ladder had lots of procedural deficiencies. The college and school service commissions were created to bridge

the 'trust deficit', still there are rising huge questions on the selection of experts and the subjective basis of selection of candidates. There are practically no standard criteria to determine placement and transfer of teachers from one school or college to the other school or college. A teacher is not independent in his academic life as transparency is completely lacking in the system. Many individuals who are striving for becoming a teacher in this sector are focusing more on influences and patronage of those who play important role in this process rather than their talents.

It is quite evident that based on the teacher's devotion to their work and the students sow the seeds of the adequate attitude and respect of students towards their teachers as well as education system as a whole. Knowing the process of the selection of teachers, one can very much suspect the degree of such devotion to teaching of the present teaching community. In recent periods, students are not only confronting each other over filing of election papers but are also directly heckling the teachers-in-charge. This shows an extreme form of disrespect and hatred toward today's teachers. The future development of Bengal depends largely on the quality and quantity of the students. Bengal should in fact bring out provisions to disengage students from such harmful activities and for good human capital.

The definitions of the key word used in the title of the topic are given in the following sub-sections.

1.2. DEFINITIONS:

1.2.1. WHITE COLLAR EMPLOYEE:

Novelist Upton Sinclair is credited for coining the term white collar. He used the term white collar to refer to any sort of clerical or administrative work. The term was used as early as 1911 and in 1923 it was used in Wall Street Journal. 'White collar' dress is generally worn by individuals whose job doesn't require strenuous physical labor. Sinclair's version also refers to the dress code. In 19th and 20th centuries male office workers wore shirts with white collars. Usually people who did white collar jobs were salaried employees where as blue collar people received hourly wages. The most popular white collar jobs are Doctor, Manager, Lawyer, Professor, Teacher, CEO etc. (Berger, 2013).

Employees doing White collar jobs usually perform their duties in an office setting. They are highly skilled and formally trained professionals. Accountants, bankers, attorneys and real estate agents also belong to the white collar employees, provide professional services to clients. The other white collar professions include engineers and architects, service providers to businesses, corporations and government agencies. People should possess formal education to be eligible to do white-collar jobs. The minimum qualification for any white-collar employees should be least a high school pass out. The most adequate qualifications are bachelors, masters or professional degrees. Since the education

level is very important for and entry level position also, so people in the white-collar professions generally get high salaries. (Scott, 2015)

Teachers are considered white collar workers. They obtain a formal education in college, and then take positions in elementary or secondary education after graduation. Teachers are involved in teaching children a variety of subjects such as math, science and history. Most teachers that work in high schools often specialize in a specific subject area like English. (Suttle, 1999)

The communities of teachers, researchers and administrators of the education sector have been considered as white collar professions.

1.2.2. OCCUPATIONAL HAZARD:

As per the Collins dictionary occupational hazard is something unpleasant that you may suffer or experience as a result of doing your job or hobby. The Ontario Ministry of labour, claims that occupational illness, normally develops over a period of time because of workplace conditions. Under the occupational health and safety act, the condition that results from exposure in a workplace to a physical, chemical or biological agent to the extent that it affects the normal physiological mechanisms and the worker's health is impaired is called as occupational illness.

Occupational hazards can be categorized into various types like physical, chemical, biological, mechanical and psychological. For the purpose of research main focus is given on the physical and psychological hazards which creates

exhaustion, injury, lack of job satisfaction, insecurity, poor interpersonal relation, work pressure, ambiguity, aggressiveness, anxiety, depression etc. in employees and changes their behavior.

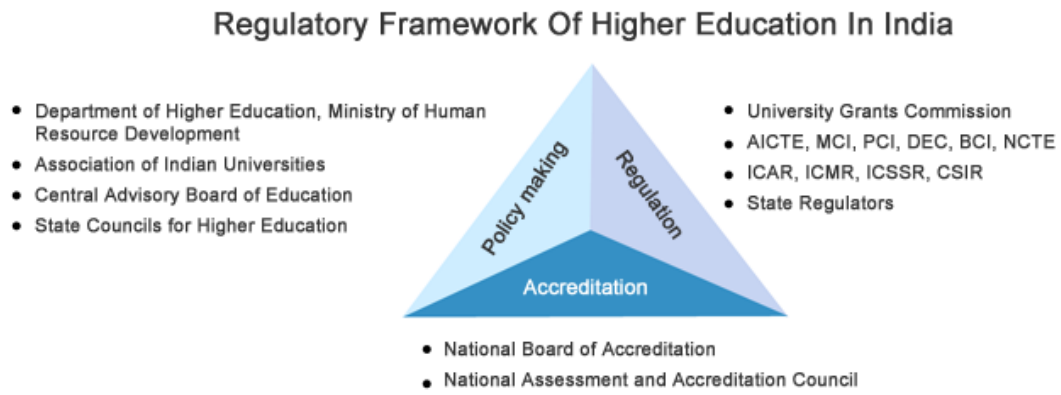
1.2.3. EDUCATION SECTOR:

Form of learning in which the knowledge, skills, and habits of a group of people are passing on from one generation to the next through teaching, training, or research is called an education. Education is an independent industry which challenges orthodox thinking.

Education sector has seen a host of reforms and improved financial outlays in recent years that could possibly transform the country into a knowledge haven. In the overall development of the country human resource is increasingly gaining significance, hence the key focus of the current decade should be development of education infrastructure. In this scenario, infrastructure investment in the education sector is likely to see a considerable increase in the current decade

In global education industry India is holding an important place. The country has more than 1.4 million schools with over 227 million students enrolled and more than 36,000 higher education institutes. India is credited to hold the largest higher education systems in the world. (INDIA BRAND EQUITY FOUNDATION, 2015)

FIGURE 1.1 EDUCATION SECTOR OF INDIA



. Source: www.ibef.org.

1.2.4. COPING STRATEGIES:

Coping is basically defined as the cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resource of the person. (Isil, 2015). Coping strategies refer to both the behavioral and psychological efforts employed by people to master, tolerate, reduce, or minimize stressful events (Taylor, 1998). An effective coping strategy is that which can reduce immediate stress, prevent any long-term consequences. Long term consequences can be of the type which influences on psychical well-being of an individual or develops illness in an individual. The effectiveness of a given coping strategy may differ among the individual who is employing it, individual who observes it or individual who evaluates it. (Snyder, Coping: The psycgology of what works, 1999). Coping strategies are traditionally divided into dichotomous categories. The most well-known coping models are the transactional model (Lazarus & Folkman, 1984) and the approach-avoidance model (Roth & Cohen, 1986). Transactional model defines coping as problem-

focused and emotion-focused. Approach-avoidance model describes coping strategies of the type of either approach or avoidance category. The most important aspect in both these models is individual's consideration as to whether they have the resources for a solution to the given situation. In the approach-avoidance model, the individual considers whether they have the resources for coping with the situation and subsequently chooses either the approach mode which focuses on a direct solution to the problem, or the avoidance mode (Roth & Cohen, 1986).

1.3. RESEARCH MOTIVATION:

We all are aware that every occupation has its own perils and dangers and occupations in education sector is no exception. But the hazards in the education sector especially in teaching profession are quite peculiar in nature as few are overt and few are covert. The overt hazards are those which are quite visible like disease transmission, physical injury due to violence, voice problem etc. The covert hazards are more of psychological than physical. Also the hazards are mostly of cumulative character than immediate. The effect of these hazards is very slow in developing and takes a time period to make them felt. Since they do not impact immediately hence most of the time they are imperceptible.

Being a teacher has rewards that no other jobs can boast. Due to these rewards there is a frequent migration of personnel to teaching profession from other jobs. Teachers take the pleasure of helping their students to discover their skills and

ability, which will in turn take the students to the peak of success. But this joy of teaching comes with the hazards. Data collected by the U.S. Bureau of Labour statistics have found out that there were 169 fatalities in the year 2010 among employees belonging to teaching sector. (Morgan, 2016).

Research and discussion on occupational hazards in India started from 1965-66 by the establishment of National Institute of occupational Health (1966) and Industrial Toxicology research centre (1965) and is rapidly increasing. A considerable number of articles have been written on the topic of occupational hazard in agricultural sector, chemical sector, coal sector etc. Very few have focused on the education sector. The current research is aimed to identify the factors affecting the coping strategies adapted by the employees of the education sector to cope with the occupational hazards. Initially qualitative study is done to identify the factors affecting the coping strategy. Then based on these factors questionnaire is designed to establish the hypothesis.

The Research questions for this research are:-

RQ1: What are the hazards faced by the employees working in the education sector?

RQ2: What could be the sources for these hazards?

RQ3: How do these hazards impact the employees?

RQ4: Which sources are more instrumental in creating occupational hazards?

RQ5: What coping strategies are adopted by the employees facing the hazards in the educational sector?

RQ6: What are the factors that influence the employees to adopt the coping strategies?

1.4. PURPOSE OF THE STUDY:

The education system as practiced in India has given rise to a number of issues, the major one being the problems faced by the employees engaged in imparting the education to the student community of India. However, the policy makers and the researchers have neglected this field. The Government policies are tailored to enhance the education of children both in primary education as well as the higher education system. But very few of the policies focus on the employees involved in imparting this education as a whole. These employees or academicians are basically the teachers of schools or institutes, professors of colleges and universities, researchers, administrators and head of the educational Institutions. Therefore, the issues of academicians have always been a neglected field in India.

The numbers of academicians working in the country are numerous. However, the problems of academicians have hardly been the focus of empirical studies. Hence, here an attempt is made to study the occupational hazards, its impacts, sources of these hazards and coping strategies used by academicians. The present

investigation is an introductory study to analyse the occupational hazards, its sources and the coping strategies adopted by the academicians of West Bengal.

Hence the aim of the study is: To analyse the impact of occupational hazards, sources of occupational hazards, and coping strategies of occupational hazards among the academicians of West Bengal.

CHAPTER – 2

2. WEST BENGAL EDUCATION SECTOR

West Bengal education sector consists of both the public as well as the private players. British missionaries and the Indian social reformists have developed the modern education system. West Bengal is famous for many reputed institutes of higher education. Among them are Amity University, Indian Institute of Management(IIM) Calcutta is actually the first IIM in India which was set up in 1961 at Joka and also it was the first national institute for post-graduate studies and research in management sciences. Indian Institute of Technology (IIT) Kharagpur is also the first IIT in India. Bengal Engineering and Science University is the second oldest engineering institution in India. Presidency College, Indian Institute of Science Education and Research, Kolkata, National Institute of Technology, Durgapur, Indian Statistical Institute and Visva-Bharati University are other reputed educational institutes in West Bengal.

The capital of West Bengal, Kolkata has always played a pioneering role in the development of the modern education system in India. This was also the city through which western models of education came to India. Sir William Jones noted philologist has established the Asiatic Society in 1784 for promoting oriental studies. 1800 had seen the establishment of The Fort William College and

In 1817 The Hindu College was established. The Hindu College was renamed as the Presidency College in 1855. The Sanskrit College was established in 1824. The Scottish Church College in Calcutta was formed by the merging of the two institutions General Assembly's Institution, established by Reverend Alexander in 1830 and the Free Church Institution established in 1844. La Martini ere Calcutta was established in 1836. The Bethune College for girls in Calcutta was set up by John Bethune in 1879. This was the time women's education was frowned upon in the society. The oldest medical school in Asia, the Calcutta Medical College was set up in 1835. In 1857, a fully fledged multi-disciplinary university was established in South Asia, which is popularly known today as The University of Calcutta. It was modeled on the lines of the University of London. In 1856 technical and engineering education came with the establishment of a civil engineering department. This setup went through various reorganisations to finally become the Bengal Engineering College in 1921. The Jesuit administered St Xavier's College was established in 1860. In 1906, the partition of Bengal led to widespread nationalistic and anti British feelings. This led to the setting up of the National Council of Education, Bengal. This later on became the Jadavpur University in 1955. Jadavpur University is also credited to become the first to introduce chemical engineering and numerous other interdisciplinary studies in India

Post independence has seen Kolkata to be in the forefront of the educational scenario. In 1951 The Government College of Art & Craft was established. Another university, offering courses in fine and performing arts was established in

1962 called The Rabindra Bharati University. The country's first management institute and is also the first in the country to offer an MBA degree of a university was set up in 1953 under the name of The Indian Institute of Social Welfare and Business Management. In 1960 the Regional Engineering College which is presently called as National Institute of Technology (NIT) was set up at Durgapur. It is the oldest and also amongst the top NITs in India.

West Bengal schools are run by both the state government or by private organisations, including religious institutions. Instruction is mainly in English or Bengali, though Urdu is also used, especially in Central Kolkata. The secondary schools are affiliated with the Council for the Indian School Certificate Examinations (CISCE), the Central Board for Secondary Education (CBSE), the National Institute of Open School (NIOS) or the West Bengal Board of Secondary Education. Under the 10+2+3 plan, after completing secondary school, students typically enroll for 2 years in a junior college, also known as pre-university, or in schools with a higher secondary facility affiliated with the West Bengal Council of Higher Secondary Education or any central board. Students choose from one of three streams, namely liberal arts, commerce or science. Upon completing the required coursework, students may enroll in general or professional degree programs. Up to March 2000, the number of primary schools was 52,385 in West Bengal. (Siraj, 2003).

The higher education sector in West Bengal is currently in a significant expansion mode. In West Bengal there are one central university, twenty four state

universities, seven private universities and one deemed university. West Bengal Council of Higher Education (WBSCHE) , established in 1994 has taken plenty of new initiatives in order to enhance the quality of higher education in West Bengal, introduction of academic auditing in universities, planning for common entrance tests for admission in post graduate courses in university, formation of expert committees for various academic activities, helping the government with setting up of new universities, drafting private university bill, advising the amendment of West Bengal Universities Act, Presidency University Act etc. (Dasgupta, 2013).

The list of along with their location, type and specialization in shown in table 2.1 in the next page.

Table 2.1 Universities of West Bengal

University	Location	Type	Established	Specialization
Adamas University	Barasat	Private	2014	General
Amity University	New Town, Kolkata	Private	2015	General
Aliah University	Kolkata	State	2007	General
Bidhan Chandra Krishi Viswavidyalaya	Haringhata	State	1974	Agriculture
Bankura University	Bankura	State	2013	General
Cooch Behar Panchanan Barma University	Cooch Behar	State	2013	General
Diamond Harbour Women's University	Diamond Harbour	State	2012	General (for Women)
IGNOU Regional Centre	Siliguri	Central	2004	Distance education
Jadavpur University	Kolkata	State	1955	General
JIS University	Agarpara, Kolkata	Private	2015	General
Kazi Nazrul University	Asansol	State	2012	General
Netaji Subhas Open University	Kolkata	State	1997	Distance education
Neotia University	Kolkata	Private	2015	General
Presidency University, Kolkata	Kolkata	State	2010	General
Rabindra Bharati University	Kolkata	State	1962	General
Ramakrishna Mission Vivekananda University	Belur	Deemed	2005	General
Seacom Skills University	Birbhum	Private	2014	General
Sidho Kanho Birsha University	Purulia	State	2010	General
University of Burdwan	Bardhaman	State	1960	General
University of Calcutta	Kolkata	State	1857	General
University of Engineering and Management	New Town, Kolkata	Private	2014	General
University of Gour Banga	Malda	State	2007	General
University of Kalyani	Kalyani	State	1960	General
University of North Bengal	Siliguri	State	1962	General
Uttar Banga Krishi Vishwavidyalaya	Cooch Behar	State	2001	Agriculture
Vidyasagar University	Medinipur	State	1981	General
Visva-Bharati University	Santiniketan	Central	1951	General
West Bengal State University	Barasat	State	2007	General
West Bengal National University of Juridical Sciences	Kolkata	State	2004	Legal
West Bengal University of Animal and Fishery Sciences	Kolkata	State	1995	Veterinary science
West Bengal University of Health Sciences	Kolkata	State	2002	Medical
West Bengal University of Technology	Kolkata	State	2001	Technology
Techno India University	Kolkata	Private	2012	Technology
St. Xavier's College	Kolkata	Private	2006	General

A news analysis published in one of the most popular magazines (Dey A. , 2015) claimed that frequent campus violence, mass copying, irregularities in admission procedure, frequent student protest over trivial matters are plaguing West Bengal's once reputed educational institutions that have at one time produced some of India's best known faces, both leaders and scholars. One of the states prestigious institutions remained the epicenter of a massive student agitation that led to the unprecedented step of its vice chancellor being asked to step down by none other than the Chief Minister herself. As educationist and former vice chancellors blamed political interference, especially by the ruling party for the "anarchy" they also claim the students were acquiring a tendency to agitate for "anything and everything".

When and where all this educational anarchy will end no one knows, but increasingly talented young people with some means are leaving the state to find better and more conducive educational and job opportunities outside the state as West Bengal rapidly assumes the reputation of a failed state amongst its own people.

CHAPTER – 3

3. LITERATURE REVIEW

3.1 OVERVIEW:

Employees working in education sector has traditionally regarded as low hazardous occupation. In historical point of view it could be true but it is not so in modern era. (Teichmann, Sources of occupational stress in technical university academics, 2010). Most of the studies in this area are focused on the occupational stress. Drawing on a considerable body of empirical evidence, it is argued that during the past decade stress among university academics has tendency to increase in all continents. The education sector in most developing countries is largely growing and includes employers with widely varying organisation cultures and involves high risk exposures. (Venebles & Allender, 2006) . Despite its risk and complexity, little has been written about the occupational health needs of this employment sector. The occupational health needs means not only information about the hazards, but also other information for planning for provision for occupational health for this sector.

Only limited number of relevant guidance documents has been published. The United Kingdom Health and Safety Commission published guidance on occupational health services in universities in 1991. (HMSO, 1991). The Department for Education and Employment in the UK has published guidance on fitness to teach, which although focused on primary and secondary education has relevance to higher education.

Computerized searches were carried out for published papers with key words like "Occupational Hazard", "Hazards in Education Sector", "Coping Strategies", "Sources of Occupational Hazards", "Occupational Health in universities", "Problems faced in Teaching profession", "Problems faced by university professors", "White Collar Jobs", Hazards in White Collar Professions", "Universities", "Education Sector" and "Problems in Schools and Colleges in West Bengal". On in-depth study of the relevant articles on the topics were retained. Of the 1045 papers identified in initial search only 48 were retained for the final review. The literature review is then divided into the 5 sections i.e. Occupational Hazards in Education Sector, Sources of Occupational Hazards, Overview of West Bengal Education Sector, Myers-Briggs Type Indicator (MBTI), and Coping Strategy (CS).

3.2. OCCUPATIONAL HAZARD IN EDUCATION SECTOR:

To understand the occupational hazards in the education sector, we need to first understand the various tasks or jobs that are handled by the employees working in the education sector. Mostly the employees working here are in the job of teaching, evaluating and managing the academics of the organisation. Especially In teaching employees spend much of their time in delivering lessons, reading aloud and directing students. The tasks involved in these professions are teaching, preparing of lessons, evaluating student's assignments and exercises, carrying out guidance and counseling work, performing non-teaching clerical duties like recording, data maintenance etc., preparing for school reviews, participating in continuing professional development, satisfying the requests of stakeholders like management, students, guardians, approving bodies, government agencies etc. They also head Institutions, Departments, and take charge of library, computer labs and workshop, maintain student discipline both inside and outside the classroom and also train students in different sports. They also accompany students to field visits and other trips. As a result the employees working in this sector might suffer from both physical and mental health due to variety of job functions and frequent overtime. While performing these tasks they face lot of situations which might lead to unpleasantness, anxiety or even damage them sometimes physically or mentally. Then we term those dangers or problems or situations as occupational hazards. (Wikipedia, 2016). A research published in the journal of speech, language and hearing in 2004 reported 11% of teachers having

current voice disorder and nearly 58% of teachers having a history of voice disorder in America. Hence this problem of voice dysfunction interferes with job dissatisfaction, performance and attendance causing 18% of teachers to miss work and about 40% of them to limit classroom activities. (Nelson Roy, 2013). In a research article published in BMC public health, concluded that neck shoulder pain and lower back pain are very common among the teachers of China. There were strong associations with different individual, ergonomic and occupational factors. (Pengying Yue, 2012).Most of the studies both in India and outside India showed that the employees working in this sector are subjected to heavy occupational stress that could adversely affect their mental health status. (Chan, 1998). In addition to occupational stress employees working in the education sector in the course of their career also faced physical health problems that were caused or worsened by their jobs as well as past work. Elaine Y.L. Chong and Allan H.S.Chan in their article have identified three main types of occupational health problems in teachers were voice problems, musculoskeletal disorders and contact dermatitis in schools of Hong Kong. (Chong & Chan, 2010). N. Barkhuizen and N. Barkhuizen in their article have identified the indicators of the occupational stress for academic staff in South African higher education institutions. (Barkhuizen & Rothmann, 2008). There is now overwhelming evidence attesting to what many academics has known for years, academia is highly stressful occupation. In fact academia throughout the world deals with a substantial amount of ongoing occupational stress. Ironically university teaching has traditionally been conceived as a relatively stress free occupation. (Fisher S. ,

1994).Although they are not highly paid in comparison to other industrial sectors, academics have been envied for their tenure, light workloads, flexibility perks and freedom to pursue their own research. (Gillespie, Walsh, Winefield, & Stough, 2001). However with many of these attractions and advantages, it comes as no surprise that higher education institutions are now commonly labeled as "Stress Factories". (Barkhuizen & Rothmann, 2008). The working environment exposes many teachers to health hazards and leads to injuries in vocal cord, respiratory diseases, and cancer, and musculoskeletal disorder, mental and neurological illness. The science of ergonomics and occupational health and safety was adopted and became useful in United State of America in the late 1960's by occupational health and safety administration (OHSA) after a policy called compensation safety establishment. In Ghana the health and safety of all employees in various occupational sectors and professions are supported by Ghana Labour Act 2003. Act 651 is to ensure that employees are not exposed to conditions that would lead them to work related injuries or illness. Teaching occupation has got several ergonomics and occupational health hazard. Most teaching staff spend most of their working hours each day on their feet teaching or lecturing due to the seating arrangement in the classroom, or lifting and handling, working with computers or inhaling certain chemicals from a laboratory are also a greater risk of health problems including varicose vein, poor circulation of air, painful swelling in feet and leg, foot problems, joint damage, low back pain, heart and circulatory problems. (Hayford, 2014). Any incident where an employee or employer is abused, threatened or assaulted in situations related to their work can

be termed as violence at work. Employees from organisations within the education sector like universities, schools, colleges, and professional institutes etc. may be exposed to violence at work due to stakeholder aggression like aggression from students, guardians, family members, friends etc., robbery, occupational violence like bullying, sexual harassments, assaults etc., opportunistic violence i.e. violence committed for the sake of violence.

Workplace violence can have significant impact on health, safety and welfare of employees and students. Educational institutions can also suffer as a result of lost productivity, loss of morale among staff and students, community dissatisfaction, and increase legal costs. Workcover Corporation has developed guidelines for reducing the risk of violence at work. The guidelines are designed to assist workplaces to identify the potential for violence and provide practical guidance for the development of prevention strategies. (Workcover Corporation, 2002).

Violence in educational campus is neither a new phenomenal word nor incident. Rather to be more specific this has become a regular and problematic practice in developed western countries also. But the character, nature and dimension of these violent incidents in the western countries are completely different from the one that is faced by Indian education campuses. The reason of these differences is Indian's attitude, value and belief system is totally asymmetrical in comparison to western countries. Student politics and campus violence have become quite synonymous with the college life in West Bengal from last decade itself. Still the

memories of Naxalbari Movement are alive in everyone's mind in West Bengal. But from 1970, violence started to haunt with the State with a tinge of idealism. From 2010 onwards West Bengal started to visualize a new phase of campus violence. The new type of violence was only created to take hold of the position in the campus. It has nothing to do with any ideology, or any agitation for the benefit or development of the student of for introduction of any learning system. Prof. Abirup Sarkar rationalized this in one of his interview with Deccan Herald on 15-10-13, that, "Actually, winds of Political Changes are blowing in the State, and that is why there is this increase in Campus Violence". Some scholars even termed it as "criminalization of Student-Union politics". This caused situations where teachers and principals were beaten and sometime were forced either to promote a student who has failed or to excuse students, who are alleged with the blame of ragging. These are the prime causes why the violence in campus of educational institution has recently become a burning issue and draws special attention of the researchers as well as of the conscious members of the Civil Society. Under this social and philosophical basis we need to put light on the growing trends of campus violence, especially in West Bengal, where the violent campuses have become an essential part of the daily news, in print and electronic media. (Chattopadhyay, Campus Violence In Educational Institution: An Experience (With Reference To West Bengal)., 2013). We have already discussed the various articles which spoke of occupational stress, ergonomic issues and also workplace violence. Apart from these there are other occupational hazards like

false accusation, disease transmission, legal consideration, burn-out etc. in this sector.

False accusations of wrongdoing have been nightmares for some unfortunate teachers. It's probably the last thing any teacher ever imagined would happen to them, but even innocent teachers have ended up on the evening news because of a child's accusation. More than one in five school or college staff i.e. 22% surveyed had been the target of a false allegation by a pupil while one in seven have been subject to false allegation by pupil's parent or family friend. (Garner, 2015). Innocent teachers and school staff are quitting their jobs after false allegations against them by pupils because they cannot cope with the stigma, according to a report in 2009. An alarming rise in the number of false allegations being made against teachers is "infecting" the atmosphere in schools and leaving staff afraid to assert their authority and discipline pupils. (Asthana, 2009).

Teachers spend their days with students, colleagues and parents making them susceptible to bacterial infection. A study led by investigations from MGEN Foundation for public health revealed that teachers are more susceptible to certain types of infections than any other workers. EYL Chong and AHS Chan in their research have shown that 24.4% of teachers suffered from contact dermatitis and almost all of them claimed that was caused or worsened by their work. (Chong & Chan, 2010).

Educators must comply with laws designed to ensure that all students have equal rights for educational opportunities. In this context lots of rules and policies are set by the government, institutions, board and universities. These should be understood and followed completely. Failing to comply with these laws, rules, and policies puts teachers in the risk of losing their professional credentials.

Dealing continuously with unhelpful parents, belligerent students and lackluster administrators can make even the most enthusiastic teachers burn out. Pressure to increase standardized test scores, poor school resources and an increasing number of non-teaching-related tasks are the cause of increasing burnout among teachers. Teachers have the highest rate of burnout (Fisher M. H., 2011). This is partly due to improper training and unrealistic expectations that teaching is "easy". Teaching, as you know, is far from easy. Burnout may be closely attributed to the fact that when people believe that they are unable to help effectively, they lose hope, and lose their self-efficacy. (Grant, 2013). Christina Maslach, one of the world's foremost experts on burnout, defines job burnout as "a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy". (Maslach, 2001)

3.3. SOURCES OF OCCUPATIONAL HAZARD IN EDUCATION SECTOR:

New teachers can be overwhelmed by the workload, especially if they have to teach five to six different courses. Course preparations can take up several hours a

day, in addition to daily teaching hours. Building relationships with students can be difficult. In high schools, adolescents tend to challenge authority, which can make teaching an alienating experience. Government mandates and monitoring of test-driven curriculums make many teachers feel restricted or disillusioned about their jobs as educator. Teaching is an incredibly rewarding experience, but it requires a lot more work than what some may think. It's convenient for people to blame teachers but we really should be giving credit to our schools for not hemorrhaging more than they are. Public schools are underfunded and professional development opportunities for staff are often the first thing that gets cut in a school's budget.

The European Trade Union Committee for Education (ETUCE) in collaboration with World Health Organisation (WHO) made a study on stress. According to the report made by ETUCE the sources of occupational hazards are grouped into professional skills, economic pressure, students, difficult parent - teacher relationship, poor planning and programming and social and personal pressure. (European Trade Union Committee for Education , 1999). The factors identified under the professional skills are new teaching method, changes in curriculum and courses, adoption to changes in information and communication technologies and inadequate training and continuing education. The factors identified under economic pressure are inadequate salary and job insecurity. The factors identified under student are drugs, violence and aggression, increases class size per teacher, lack of student motivation, attention and interest, decrease in discipline, grading and assessment and finally target setting and meeting targets. The factors

identified under difficult parent teacher relation are new demands regarding roles of the teacher, responsibility of overall student welfare and decreased parent participation. The factors identified under poor planning and programming constant restructuring, frequent reforms in the vocational education system, working alone and the transition to team work, lack of employees and poor allocation, strong administrative hierarchy with lack of support and insufficient financial resources. The factors identified under social and personal pressure are teacher's own ambition, concerns about the quality of education, lack of coherence between personal goals and professional obligations, social positions have no recognition or acknowledgements, lack of public esteem, and society demands on the duty of a teacher in child's upbringing. The factors identified under the school as a stressful workplace are excessive workload and hours of work and lack of time, Lack of control and autonomy, environmental noise, poor ventilation, lack of solidarity and morale, problems with hygiene and security, excessive paper work and administrative duties, discrimination and workplace bullying, lack of sufficient and up-to-date teaching material, equipment and classroom and solitude and isolation.

Milan Shreshta in her blog identified hazards and its related causes. (Shreshta, 2011). According to her the causes of work place injury among university teachers were found to be because of the slippery surfaces, falls from heights and other accidents respectively. Dust and poor air conditioning was the cause of voice disorder among university teachers. Main causes of work place violence were Gender bias, relationship with students, relationship with boss, relationship

with colleague and political bias. The respiratory disorders were caused by chalk dust, poor ventilation, low humidity and impure water. Backache among university teachers was caused by work stress, work postures and work place injury. Occupational stress was caused due to multiple reasons like organisational culture, roles in university, career development and decision control. The organisation culture involves work environment, lack of defined objective, poor problem solving environment, poor communication and non-supportive environment. Roles in university related factors are role ambiguity, role conflict and high responsibility for students. Career development related problems are career uncertainty, career stagnation, poor status, poor pay, job insecurity and low social value. Decision control related problems are low participation in decision making, lack of control over work and little decision making in work. Job related components are ill defined work, high uncertainty, and monotonous work, underutilization of skill and continua exposes to their students.

3.5. MYERS-BRIGGS TYPE INDICATOR (MBTI):

The aim of MBTI is to identify through its measuring instrument the basic preferences of people in regard to perception and judgment. The notion is that the effects of each preference, singly and in combination can be established by research and put into practical use, especially in relation to decision making behavior. The four preference dimension of MBTI accumulates into a set of 16 permutations dichotomies that result in 16 personality types. These form the basis of the Myer's model and therefore MBTI. To code these types MBTI adopts a set

of ordered letters, first letter (E) extrovert or (I) introvert; second letter (S) sensing or (N) intuition; third letter (T) thinking or (F) feeling; fourth letter (J) judging or (P) perceiving. There is a tendency to understand each of the 16 types as the sum of the essential parts such as ESTJ = E+S+T+J. However it is the interaction of the four preferences that are important and the unique mental pattern these interactions determine. Thus INTJ is taken to be the most independent minded of the 16 types, while ISTP is seen as in particular having an intuitive investigatory aptitude. (Yolles M. , 2009). Thus for instance the 16 types are listed as: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ and ENTJ. However they can also be blocked into 4 stable patterns (Boje, 2004) (Berens, 2007) and referred to as Opinion (ENTJ, ENTP) and Government (ESTJ, ISTJ); Revolutionary (ENTJ, ENTP) and Reform (ESTJ, ISTJ); Prince (ENTJ, ENTP) and Bureaucratic (ESTJ, ISTJ) and Super (ESFJ, ISFJ) and Heroic (ENFJ, ENFP).

The purpose of the Myers-Briggs Type Indicator® (MBTI) is to make the theory of psychological types described by Swiss psychiatrist C. G. Jung (1921/1971) understandable and useful in people's lives. The essence of the theory is that much seemingly random variation in behavior is actually quite orderly and consistent being due to basic differences in the way individuals prefers to use their perception and judgment. Main postulates of this theory is that people have inborn behavioral tendencies and preferences. Isabel Myers and Catherin Briggs

expanded on Jung's work by developing an instrument to help people identify their preferences.

Many researchers have used this MBTI instrument for evaluating the personality types of their respondents. One of them is Kun, András István and Kiss, Marietta and Kapitány, Anna in their study focused on the effect of personality type and personality preferences measured by the Myers-Briggs typology, on higher education students' choice of profession and on their academic performance. They statistically analyzed a sample from two slightly similar bachelor majors studied at the University of Debrecen, Hungary to reveal both the general and major-specific effects of personality. They found that the most frequent types in both majors were ENFJ and ESFJ. However, differences were revealed in the relative frequencies in the ESTJ, ISTJ and ENFJ types. They identified significant differences between the majors in the average preferences along the introversion-extraversion scale and in the sensing-intuition dichotomies. They also found differences in the explanatory power of personality for the two majors and also in the types and preferences which contribute positively or negatively to academic success. (Kun, 2015).Another researcher Yolles, Maurice and Fink, Gerhard in their study indicated that current type theories are not necessarily stand alone but may be seen as complimentary within a broader conceptual framework. They utilized the MBTI and Mindscape theory for his investigation. (Yolles M. a., 2009). Bocar, Anna C. and Pasok, Prudelen C. and Labastin, Benjiemen A in their study limits its investigation to the learning and teaching styles of the

respondents. These learning styles are found to be the combination of Myers-Briggs Type Indicator (MBTI) in which it was derived from Carl Jung's Theory of psychological types, and from Felder-Silverman Learning Style Model (1996). The results established that four colleges preferred most the verbal style of learning while the least preferred learning style of the three colleges is aural learning style. Furthermore, it was found that the 100% of teachers preferred most the logical teaching style. (Bocar, 2012). The result of another research using the Myers-Briggs Type Indicator (MBTI) showed that conscientiousness, extroversion and MBTI intuition were positively correlated with managerial level, and neuroticism, MBTI introversion and sensing were negatively correlated with managerial level. These findings attest to the utility of personality tests used within the occupational community, for selection and assessment of suitability for promotion to senior managerial roles. (Moutafi, 2007).

3.6. COPING STRATEGY INVENTORY:

The original coping strategy inventory (CSI) was developed to categories coping responses based on coping target and directionality of response. With this system individuals are classified using a 2X2 matrix that quantifies the degree to which each strategy is generally employed. Coping efforts are first categorized as to whether they represent an engagement strategy involving approach related actions that result in confronting hazards, often viewed as a crucial factor in limiting the long term psychological and physiological sequel ace of environmental stressors, or disengagement strategy (avoidance) seeking to limit exposure to noxious

stimuli often producing desirable short term effects, but leading to long term problems including depressive symptoms. (Levine, Warrenburg, Kerns, & Schwartz, 1987)). Within these categories the target of coping effort is either problem-focused or emotion –focused. (Suls & Fletcher, 1985) (Laux & Weber, 1993). Emotion focused coping emphasizes the regulation of one's effective response, whereas problem focused coping emphasizes the management of the hazard producing situation. The CSI was selected because it was believed to adequately address the questions of coping it, addressed factors that were crucial to the model. The CSI was originally constructed as a 78-item questionnaire. (Tobin, Holroyd, Reynolds, & Wigul, 1989). A seven-point Likert scale was used to record the participant's responses. When individuals face events which are stressful that can be controlled by them Lazarus and Folkman pointed out that then these individuals adopt problem focused strategies. Whereas when these individuals cannot control the stressful events they adopt emotion focused strategies. (Lazarus R. a., 1984). The coping methods were divided into eight types by Stone and Neale. These eight types were distraction, situation re-definition, direct action, catharsis, acceptance, seeking social support, relaxation and religion (Stone, 1984). A revised version Ways of Coping Checklist (WCC) was developed by Folkman and Lazarus using problem and emotion-focused coping methods as the basis. This WCC was used to test university students. The test results showed eight inventories like direct coping, alienation, self-control, search for social support, accept responsibilities, prevention/avoidance, plan for solving problems and positive appraisal coping (Folkman, 1985).

Scheier, Weintraub and Carver have done huge researches on the coping strategies. The results of these researches revealed that denial/aloofness, centre of the problem, self-accusation, acceptance/abandonment, active re-interpretation, evasion through delusions, and social support are the main stress coping strategies (Scheier, 1986).

Coping strategies were divided into direct and indirect strategies by Pine and Aroson. They categorized the concepts into action and non-action. These divisions and categorizations were mutually combined to form four categories, these four categories are direct/action, direct/non-action, indirect/action, and indirect/non-action. The findings of this research shows, that the most active strategy that is beneficial for as individual's growth is direct/action. This emphasizes facing hazardous situations with courage. However, the most passive strategy that is harmful for physical and mental health of any individual is direct/non-action. This is when an individual takes the help of harmful alcohol or drug to flee from reality. This may cause irrecoverable harm (Pine, 1988).

Coping Matrix which is a table that can be used to explain coping strategies and coping resources was pointed out by Justice. This Coping Matrix splits the coping behaviour into problem-focused and emotion-focused. In problem-focused coping an individual tries to change the strongest source of the problems which including both the external and internal environment. In emotion-focused coping an

individual tries to points at moderate the negative impact or the difficulties brought on by problems, including both the physical and emotional perspective. Justice even claims that the coping strategies used by an individual normally include three methods like direct action, indirect action, or controlled action, These are irrespective of whether the resources for coping exist or not. They hinder individual from adjustment of factors of their success (Justice, 1988).

A cope inventory was developed by Carver, Weintraub and Scheier's, when they were researching on university students. This cope inventory is a multidimensional inventory. It integrates the similar coping methods into two types (Carver C. W., 1989). These two types are: problem-focused coping which includes the adoption of active coping actions, suspension of competitive activities, suspension of coping behaviours and search for tools of social support and emotion-focused coping includes denial, acceptance, search for religion, positive interpretation and search for emotional social support.

A multidimensional coping inventory (MCI) was developed by Endler and Parker. This MCI includes three methods i.e. mission-focused coping (which is similar to problem-focused), emotion-focused coping and evasion-focused coping (Endler, 1990). The stress coping methods of young people were divided into four categories by Halstead, Johnson and Cunningham. These four categories are problem-focused coping, search for social support, positive thinking and evasion coping (Halstead, 1993). On investigation of the university students revealed

when exams were the source of stress, this stress was estimated as threatening and harmful stress by Carver and Scheier. These results also showed the frequent usage of problem-focused coping, search for social support and positive appraisals. (Carver C. a., 1994) . Thoits' pointed out in his research that people who continuously have higher self-esteem and control power, often tend to use the problem-focused coping strategies method with imitativeness. Whereas people, who have lower self-esteem or lack control, tend to passively use the emotion-focused coping strategies method (Thoits, 1995). The source of stress experienced by 110 university students of the nursing department was investigated by Timmins and Kaliszer. The result of their investigation showed that the main coping strategies are like schools arranging education for clinical internship, or guiding students to face stress recognition, and also incorporating counseling from direct internship professors (Timmins, 2002). 113 university students were examined for their psychological and physiological aspects of adjustment by Kim and Seidlitz. Their investigations showed that stress coping methods can be categorized into problem solving, search for support, rejection, sense of humor and physiological situations (Kim, 2002) . University students were investigated by Misra and Castillo using the questionnaire investigation method. The findings of their investigation showed that the stress coping attitudes of these students include frustrations, disputes, changes and taking up responsibilities (Misra, 2004). The same questionnaire investigation method was used by Karademas and Kalantzi-Azizi to investigate university students. The investigation results emphasized that when an individual faces stress, they choose

different stress estimations to cope with stress (Karademas, 2004). Investigation of 235 university students for their adoption of stress coping methods was done by Twamley, Hami and Stein. The results of this investigation showed that the coping methods were divided into three types. These are current experience mode, evasion and negative strategic modes. The negative strategic modes include usage of alcohol and drug (Twamley, 2004). An investigation based on the optimists and pessimists was done by Iwanaga, Yokoyama and Seiwa. The results of this investigation showed that the coping methods were divided into problem management, problem estimation, re-establishment of appraisals, and evasion (Iwanaga, 2004). Another research on the university students of the nursing department done by Steele, Lauder, Caperchione and Anastasi showed that when students faced clinical care, interpersonal relationships and financial problems, then to cope with them effectively they use effective management experiences, such as a support Web site, sequential handling, active anticipation and attitude (Steele, 2005). Research in cyber bullying indicates that it could be very problematic for classifying strategies into known general categories. This may depend on the construction of the measuring tool (Riebel, 2009). In another article on cyber bullying, the coping mechanisms are like leaving a website, deleting threatening messages etc. In the context of cyber bullying, some studies include technical coping or directly addressing the bully in this model (Parris, 2011). Veronika Slegolova used the coping strategies like technical coping, avoiding, defensive coping and social support in her article on coping on cyber bullying among adolescent victims. (Veronika Šléglová, 2011).

There are few researches which spoke of the factors influencing the coping strategies of an individual. Conner in his study of finding the relationship of personality type with coping strategy claimed that personality may directly facilitate or constrain coping. (Jennifer K. Connor-Smith, 2007). In his study he found out that personality most strongly predicted coping in his samples .In another study the researcher tried to investigate the relationship of personality profile and the coping strategies adapted by military pilots. (Maja Meško1, 2009). The results of this study revealed that certain personality characteristics were differently and significantly related to specific stress coping strategies adopted by military pilots. In another research personality and coping play both independent and interactive roles in influencing physical and mental health. (Connor-Smith2, 2010). The results of this study reveal personality is strongly associated with the coping skills of the individual. Another study on factors influencing the coping strategies among nursing personnel revealed that strategies focused on the problem were adapted to a greater extent more by postgraduate nurses, head nurse and nurses with greater work experience. Intensive care unit nurses mainly adapted the strategy of denial. While strategy focused on emotions were most adapted by female nurses. (Zyga, 2016).

3.7. FINDINGS FROM THE LITERATURE REVIEW:

On going through various articles and research papers under the categories of the groups like occupational hazards in education sector, sources of these hazards and coping strategies, the following are the findings.

1. Most of the researches that were done on teachers whether they belong to primary section or high school are done in China, Honking, America and Africa. Very few are from India and practically very few may be less than ten on West Bengal.
2. On the basis of these researches the occupational hazard that were identified were Burn-out, Occupational Stress, Voice problems, Musculo-Skeletal disorder, False accusation, Workplace violence and Disease transmission. Out of this hazard huge amount of research was done in the field of occupational stress, voice problems and musculo-skeletal disorder. The voice problems, musculo-skeletal disorder and the disease transmission was more of an attribute for the primary school teachers as they were into proximity with the children most of the time. The occupational stress and the burn-outs were attributed to university and college professors as per the articles found.
3. The sources or the causes for the above mentioned hazards were first the job structure of today's teacher's in the modern education system. Today's teacher have to do jobs other than just teaching like, evaluating, assessing, invigilation, counseling, etc.. Doing these activities they face pressure from their peers, authorities and also external bodies like political influences etc. Hence the main source of their hazards is there job itself. To be successful in their jobs they need to constantly upgrade their knowledge and hence keep on improving their professional skills. To do their task they have to handle students, maintain cordial relationship with

the parents of their students, face huge economic pressure and also work pressure. Apart from these factors which are quite instrumental in escalating the hazards, the other factors are poor planning and programming of the organisations and also organisation culture.

4. On reviewing articles and researches on coping strategies it was found that the common coping strategies that are adopted by the individuals can be distributed under into two categories that are engagement and disengagement coping strategies. The engagement coping strategies are problem solving, cognitive restructuring, express emotion and social support. The disengagement coping strategies are problem avoidance, wishful thinking, self criticism and social withdrawal. Among these strategies some are problem focused and some are emotion focused. Various articles and researches showed that the factors influencing the problem focused strategies were influence by the work experience and educational level. If the educational level is higher and work experience is higher they adopt problem focused coping strategies. The job type also sometimes influence the type of coping strategy adopted by a person i.e. coping strategy like denial. Emotion focused coping strategies are mainly adopted by females as per an article. Which also means gender can be one of the predictors of adopting the coping strategy by an individual. Age group and marital status has no significant influence in the adoption of coping strategy. Most of the studies on coping strategies are done in the health care sector.

3.8. RESEARCH GAPS:

In order to put much of recent research into its proper theoretical perspective, it is important to notice, that the approach to the occupational hazards is at the core of majority of recent research into occupational hazards of the employees working in the education sector. Most of the studies have concentrated on identifying the occupational and organisational sources of stress that are related to various indices of strain (e.g. job dissatisfaction, psychological stress, burnout, sickness absence). Turning to the concept of stressors, this is an emotionally laden concept that reflects the attributions employees make about the source of occupational stress. Hazards can refer to a wide variety of environmental conditions or situations that affect the well-being of employees.

From theoretical perspective, for several reasons, we predict that our understanding of sources of occupational hazards in education sector has not progressed that far over the past decade.

First, very few studies are there on the academic employees as initially this profession was considered of low hazardous scenario. Moreover whatever study was done was done outside India and only few within India like special educators of Kerala and others. Today, when the modern education system environment is changing drastically, to such an extent the researches are not focused in this area. It is very much important to know what the probable hazards of this sector are and

also what could be the sources of this hazard. This will help the policy makers to frame policies for the well being of the academicians.

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Second, the identification of the sources of occupational hazards often did not follow the theoretical framework suggested by occupational hazard literature. The majority of research has not been fully integrated into an appropriate theoretical framework that enables to understand in which areas the educational institutions have to modify its organisation and work for better cope with occupational hazards

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Thirdly, very few studies have been made to identify the factors influencing the adoption of the coping strategies. Most of the research in coping strategies focused on the adoption of coping strategies and consequences faced by the employees adopting such strategy. But none focused on the factors influencing the employees to adopt the coping strategy.

Fourthly though there are a few researches on finding relation of personality and the coping strategies most of them are of meta-analysis, and none was of empirical in nature.

CHAPTER – 4

4. OBJECTIVE AND HYPOTHESIS

4.1. RESEARCH PROBLEM:

Hazards are an inherent feature of any occupation, and the growing evidence even in perceived non-hazardous jobs suggests it may be increasing in severity. Occupational hazard has been implicated as the major contributing factor to growing job dissatisfaction, rapid turnover and high attrition rates among employees working in Education Sector. It was found that the hazards impact not only their physical and mental health but also their abilities to the job demands. This will seriously impair the provision of quality care of the students and efficacy of educational service delivery.

A survey of literature on teachers be it in schools, colleges or universities reveal that although a great deal of research has been carried out relating to occupational stress and job hazards in teaching profession nationally and internationally, little had been written about employees working in education sector of West Bengal. Given the international setting and other states setting the status of educational services in West Bengal are quite different.

The research is aimed identify the hazards and their sources along with the coping strategies adopted by the employees of the education sector. The knowledge obtained would be useful in the formulation of recommendations to address the occupational hazards amongst the employees working in the education sector of West Bengal.

4.2. RESEARCH OBJECTIVE:

Research objective has been developed from the research problem statement after an in-depth study of the domain and review of literature detailed in chapter 2. In finalization of the objective due considerations have been taken with respect to the impacts of the occupational hazards on the employees and also the various sources of these hazards. The research objective has been developed accordingly as follow:-

1. To provide the general background to the discussion on occupational hazards faced by the employee working in White Collar jobs in the educational sector in West Bengal.
2. To review and summarize the impacts of these occupational hazards on the employee's working in the education sector of West Bengal.

3. To identify the factors causing occupational hazards to the employees in the education sector.
4. To identify and prioritize the sources of these occupational hazards,
5. To analyse the coping strategies adopted to cope with the occupational hazards of the education sector.
6. To analyse the factors influencing the coping strategies of the employees facing the occupational hazards in the education sector.

4.3 RESEARCH HYPOTHESIS:

In order to achieve the above mentioned objectives a set of 22 hypothesis have been formulated, which have been tested and conclusions drawn on the basis of test results. The research hypothesis are categorised in 3 groups.

The **First group** deals with the impact of occupational hazard among different age groups, gender, marital status, educational level, earning status, working modes, working experience, different organisations, different funding agencies, employees occupying different positions in the organisation and different personality traits.

Hypothesis of the **First Group** are as follows:-

1. H_{01}: There is no significant difference in the impact of occupational hazards among the male and female respondents
2. H_{02}: There is no significant difference in the impact of occupational hazards among the different age groups of the respondents.
3. H_{03}: There is no significant difference in the impact of occupational hazards among the different marital status of the respondents.
4. H_{04}: There is no significant difference in the impact of occupational hazards among the different educational level of the respondents.
5. H_{05}: There is no significant difference in the impact of occupational hazards among the different earning status of the respondents.
6. H_{06}: There is no significant difference in the impact of occupational hazards among the respondents working in different working modes.
7. H_{07}: There is no significant difference in the impact of occupational hazards among the respondents working with different academic experience.
8. H_{08}: There is no significant difference in the impact of occupational hazards among the respondents working in different organisation types.
9. H_{09}: There is no significant difference in the impact of occupational hazards among the respondents working in organisations funded by different funding bodies.

10. H_{010}: There is no significant difference in the means of the impact of occupational hazards among the respondents working in different positions in the organisations.
11. H_{011}: There is no significant difference in the impact of occupational hazards among the respondents possessing different personality traits.

The **Second Group** tries to investigate the significant predictors of the impact of occupational hazards. Hypothesis of the **Second Group** are as follows:-

1. $H_{012:}$ There is no linear relation existing among the variables X2, X4, X5, X6, X7, X8, X9, and X10.

Which means $H_{012:}$ B2 = B4 = B5 = B6 = B7 = B8 = B9 = B10 = 0

$Y_1 = C + B2X2 + B4X4 + B5X5 + B6X6 + B7X7 + B8X8 + B9X9 + B10X10$

Here X2 = Age Group, X4 = Education Level, X5 = Earning Status,

X6 = Working modes, X7 = Academic Experience, X8 = Organisation Types,

X9 = Funding Bodies and X10 = Position held.

2. $H_{013:}$ There is no linear relation existing among the variables Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10, Z11, Z12 and Z13.

Where in the linear equation for impact of occupational hazard

$Y_2 = K + P1Z1 + P2Z2 + P3Z3 + P4Z4 + P5Z5 + P6Z6 + P7Z7 + P8Z8 + P9Z9 + P10Z10 + P11Z11.$

Here Z1 = Task Conflict, Z2 = Task Density, Z3 = Task Control, Z4 = Parent Control, Z5 = Student Control, Z6 = Stakeholder Policy, Z7 = Stakeholder Interface, Z8 = Stakeholder Administration, Z9 = Transparency in organisation, Z10 = Entity Interface, Z11 = Work Structure and Z12 = Campus Culture.

Which means $H_{013:}$ P1 = P2 = P3 = P4 = P5 = P6 = P7 = P8 = P9 = P10 = P11 = 0

The **Third group** deals with variables influencing the different coping strategies. Hypothesis of the **Third Group** are as follows:-

1. H_{014}: There is no linear relation between the Coping Strategies-Problem Solving and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
2. H_{015}: There is no linear relation between the Coping Strategies-Cognitive Restructuring and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

3. H_{016}: There is no linear relation between the Coping Strategies-Express Emotion and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
4. H_{017}: There is no linear relation between the Coping Strategies-Social Support and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
5. H_{018}: There is no linear relation between the Coping Strategies-Problem Avoidance and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
6. H_{019}: There is no linear relation between the Coping Strategies-Wishful Thinking and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

7. H_{019}: There is no linear relation between the Coping Strategies-Self Criticism and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
8. H_{021}: There is no linear relation between the Coping Strategies-Social Withdrawal and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.
9. H_{021}: There is no linear relation between the Coping Strategies-Political and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

CHAPTER – 5

5. RESEARCH METHODOLOGY

5.1. OVERVIEW:

The research methodology adopted for this research is described in the following sub-sections: the research design, the sources of data, sampling design which contains the sampling technique used and data collection instrument developed. Also the different analytical tools, which are being used for analysis of the collected data to derive at the conclusions, are also being explained.

5.2. RESEARCH DESIGN:

Mixed research design in terms of both qualitative and quantitative research design approach has been adopted for achieving the objective of the research. The research design is divided into two phases.

5.2.1. PHASE -1:

Initially the qualitative research method is adopted to identify the hazards, sources of hazards, coping strategies and factors influencing the coping strategies amongst the respondents working in the education sector of West Bengal with the help of

"the public voice". This method was applied by Teichmann, Mare, Ilvest and Jüri Jr. in their paper "**Sources of occupational stress in technical university academics".** This phase has been utilized to identify the concepts to develop a conceptual framework. The qualitative research is used as a precursor to quantitative method used in phase – 2.

In this phase a descriptive qualitative design is used to facilitate an in-depth exploration of the respondents' experience regarding the hazards faced during their occupation, perceived sources for these hazards and also their coping methods to these hazards. The data is collected through un-structured interviews. Qualitative research interview allows obtaining information about topics in which different level of meaning need to be explored. (King, 1994). Therefore, a qualitative design is used to help discover the different meanings and characteristics of impacts of occupational hazards, sources and coping with respect to occupational hazards from the respondent's perspective. The focus of the present study is to explore and develop a conceptual framework on the occupational hazards, sources of these hazards and the coping strategies adopted.

The sampling aimed here is towards the theory construction and not for population representativeness. The data was initially collected on the occupational hazards, sources of these hazards and the coping strategies adopted and also the possible factors that are influencing the coping strategies by interviewing few of the academicians who were interested in the study to share their in-depth experience on the above mentioned concepts. The qualitative research method

was adapted for the reason to clarify the occupational hazards and the sources of these hazards and also the coping strategies adopted along with the factors influencing the coping strategies in the educational sector of West Bengal with the help of "public voice". Open answers unstructured interview as a conversation between two people e.g. researcher and the respondents working in academic sector of West Bengal on specific topics (occupational hazard in education sector, sources of these hazards and coping strategy) was adopted. There were no designate specific questions asked by the interviewer. Obtained information from the interview was transcribed into report in the form of field notes. All the interviews were taken by the researcher herself who is experienced in taking such interviews from her past jobs handled. Each face to face interview extended to 20 to 35 minutes. The interviewee was approached multiple times to get rich data.

In order to build up the concepts the reports written were analysed and the common elements extracted from the reports. The critical incident technique was adopted for enabling the extraction of elements common to occupational hazards and sources for these hazards and also the coping strategies. This procedure resulted in identifying the 7 types of occupational hazard faced by the respondents working in the education sector of West Bengal. Along with this 12 sources for these hazards were identified. The other concepts that emerged were stakeholder concept, task concept, personality traits and 9 types of coping strategies.

Analysing the texts from the scripts of the respondents which were collected through in-depth-interviews involves five complex tasks. Firstly we try to

discover the themes and subthemes from the texts. The term "Theme" more naturally connote the fundamental concepts we are trying to describe. In everyday language we talk about themes that appear in texts and refer to particular instances as expression of goodness or anger or evil. In selecting the set of terms over others, we surely ignore subtle differences, but the basic ideas are just as useful under many glosses. Secondly we describe the core and peripheral elements of the themes that are identified. Third step is to build the hierarchy of the themes. In the fourth step we apply the themes, i.e. attaching them to the chunks of actual texts. The final step is to linking the themes into the theoretical model. The steps followed are explained in Annexure – V.

5.2.1.1. THEME IDENTIFICATION TECHNIQUE:

The techniques for discovering themes come from across the social sciences and from different methodological perspectives. A priori theme also comes from already agreed on professional definitions found in literature reviews, from local, commonsense constructs, and from researcher's values, theoretical orientation and personal experience. (Bulmer, 1979) (Maxwell, 2005) (Strauss, 1987). A. Strauss and Corbin call the use of a priori themes theoretical sensitivity.

The decisions about what topics to cover and how best to query people about those topics, are rich sources of a priori themes (Dey I. , 1993). In fact, the first pass at generating themes often comes from the questions in an interview protocol (Coffey A., 1996). Mostly, though, themes are derived empirically induced from

data. Even with a fixed set of open-ended questions, there's no way to anticipate all the themes that will come up before you analyze a set of texts The act of discovering themes is what grounded theorists call open coding, and what classic content analysts call qualitative analysis (Berelson, 1952) or latent coding (Shapiro, 1997).

There are many variations on these methods and many recipes for arriving at a preliminary set of themes (Tesch, 1990). "Anyone who has listened to long stretches of talk," says D'Andrade, "knows how frequently people circle through the same network of ideas". Repetition is easy to recognize in text. The more the same concept occurs in a text, the more likely it is a theme. Based on this a conceptual framework was developed.

5.2.2. PHASE -2:

The concepts evolved from the phase – 1 were utilized in developing a questionnaire for testing the conceptual framework so evolved. The questionnaire consists of eight sections. These eight sections are to capture data of demographic details of the respondent, occupational information of the respondent, personality trait identification, impact of occupational hazard, sources of occupational hazard, stakeholder related information, task related information and coping strategy questionnaire.

5.2.2.1. MBTI INSTRUMENT:

For the purpose of identifying the personality trait of the respondent MBTI tool has been used. The MBTI tool has been licensed by CPP Inc. to the researcher for use in academic research The MBTI tool is basically a set of 70 questions with just two options to tick for the respondent. The questions are repeated to eliminate the outliers. Based on the responses a respondent can be categorized among one of the sixteen personality types. The sixteen personality types are as follow:-

1. Extraverted intuitive feeling judging (ENFJ)
2. Extraverted intuitive thinking judging (ENTJ)
3. Extraverted intuitive feeling perceiving (ENFP)
4. Extraverted intuitive thinking perceiving (ENTP)
5. Extraverted sensing feeling judging (ESFJ)
6. Extraverted sensing feeling perceiving (ESFP)
7. Extraverted sensing thinking judging (ESTJ)
8. Extraverted sensing thinking perceiving (ESTP)
9. Introverted intuitive feeling judging (INFJ)
10. Introverted intuitive feeling perceiving (INFP)
11. Introverted intuitive thinking judging (INTJ)
12. Introverted intuitive thinking perceiving (INTP)
13. Introverted sensing feeling judging (ISFJ)
14. Introverted sensing feeling perceiving (ISFP)
15. Introverted sensing thinking judging (ISTJ)

16. Introverted sensing thinking perceiving (ISTP)

The score key as used by Harley Friedman and advised by Nancy Schaubhut, M.S, and Program coordinator of CPP Inc is attached in the Annexure – III, Along with the set of 70 questions.

5.2.2.2. CSI INSTRUMENT:

The coping strategy questionnaire in built on the Coping Strategy Inventory(CSI) model (Tobin D. L., 2001). The coping strategy inventory is a questionnaire consisting of 72 items. This is designed to assess the coping thoughts and behaviors of the respondents in response to any specific stressors. The CSI instrument format adopted from the Lazarus "Ways of Coping" Questionnaire (Lazarus.R.S., 1981). The coping strategies utilized in this research include:

1. **Problem Solving:**

People adopt the coping strategy of problem solving to eliminate the sources of hazards, by changing the hazardous situation. This strategy refers to items referring to both behavior and cognitive strategies.

2. **Cognitive Restructuring::**

People adopt the coping strategy of cognitive restructuring to try to alter the meaning of the hazardous situation as it is less threatening. This strategy includes cognitive strategies and is examined for its positive aspects. It is then is viewed from a new perspective.

3. **Express Emotion:**

People adopt this strategy to release their stress and anxiety by expressing their emotions. This strategy includes items that refer to releasing and expressing emotion.

4. **Social Support:**

People who adopt this strategy seek support from their friends and family members. Items included in this strategy refer to seeking emotional support from family members and friends.

5. **Problem Avoidance:**

People who adopt this strategy basically deny the existence of any problems. They try to avoid any thoughts or actions against the hazardous agents. The items included in this strategy refer to the denial of problems and the avoidance of thoughts or action about the hazardous agent.

6. **Wishful Thinking:**

People who adopt this coping strategy hope and wish that the situation will become better. This strategy refers to the cognitive strategies that reflect an inability or reluctance to reframe or alter the hazardous situations. The items in this strategy involve hoping and wishing that things could be better.

7. **Self Criticism:**

People who adopt this strategy are frequently adopted by those people who face high levels of stress which impacts them negatively than impacting positively

(Zuroff, 1995). In fact the concept of self criticism can be a direct concept for the personality trait of the person with numerous outcomes which are maladaptive.

8. **Social Withdrawal:**

People who adopt this coping strategy also adopt the self criticism coping strategy. The items included in this strategy reflect the behavior of blaming oneself for such unpleasant situations and also criticizing oneself.

9. **Political:**

People who adopt this strategy believes in taking support, advice and suggestions from people who are either politically affiliated or having a great influence in the society as to how to overcome the situation which is giving them lots of stress.

Coping strategies inventory (CSI) tool was utilized by many researchers for the purpose of the research. Clifton in his article has used the CSI tool to study to establish the psychometric properties for a coping strategies inventory. (Clifton C. Addison, 2007). Another Researcher has used the Coping Strategy Inventory to assess the appraisal of stressful events.. The coping strategy inventory was employed to assess coping strategies used in responding to the most disruptive event that had occurred in the past month. (Koellner, 1987). Andrea Bezerra Rodrigues in her research attempted to control factors resulting to occupational stress in individuals using the coping strategies. (RodriguesI & ChavesII, 2008). Jose Marıa in her article using the coping strategy inventory has found out that most caregivers reported higher anxiety and depression levels. Use of disengagement coping strategies and higher caregiver burden predicted anxiety on

logistic regression. In turn, use of disengagement coping strategies and higher caregiver burden predicted depression on logistic regression. These results may be useful for designing treatment interventions that aim to modify the use of coping strategies and thus reduces caregiver anxiety and depression. (Jose Maıa Garca-Alberca, 2012). Ying Ming Lin in his article investigated stress coping style inventory of university and college of technology students, and established that it points at the methods selected along with stress coping as a type of process and attitude. The coping strategy questionnaire has been tested for both reliability and validity.

5.2.2.2.1. RELIABILITY OF THE CSI INSTRUMENT:

Chronbach's alpha has been most frequently reported the coefficient of reliability for measuring the coping process. The alpha coefficient for the coping strategy questionnaire is 0.986. Which is quite acceptable as Chronbach's alpha above 0.7 is acceptable (Tavakol, 2011).

5.2.2.2.2. VALIDITY OF THE CSI INSTRUMENT:

Validity of the coping strategy questionnaire has been assessed by construct validity. There are several studies that have looked at the relationship of coping strategy questionnaire to instruments measuring the other important constructs in stress and coping literature. The coping strategy questionnaire is particularly

predictive of depressive symptoms for individuals who are in high stress zone. Also persons who have a greater self efficacy report doing more problem solving and less problem avoidance than individuals with lower self efficacy (Tobin, 1984). The purpose of this questionnaire was to test the conceptual framework obtained from qualitative data.

5.3. POPULATION OF THE RESEARCH:

In West Bengal there is One Central University, Twenty Four State Universities, and Seven Private Universities and One Deemed University. Besides there are Three Regional Centre's of IGNOU at Siliguri, Kolkata and Raghugnathganj and one sub-regional centre of IGNOU at Darjeeling.

The HEI (Higher Education Institutions) in West Bengal can be broadly divided into two categories in terms of their financial dependence on state government. (i) Government colleges and (ii) grant –in-aid colleges. The government colleges are fully dependent on the state government for their maintenance and development. The grant-in-aid colleges receive maintenance grant from state government and occasionally development grant. Most of these colleges are recognized under section 2(f) and 12(B) of the UGC (University Grants Commission) Act, 1956 and receive the UGC grants. These colleges are free to create posts beyond the sanctioned posts. (Sarkar, Pabitra;, 2004). In total West Bengal have 899 colleges (Ministry of Human Resource Department, 2013)

West Bengal is now divided into 20 districts which include Alipurduar District form 24th June 2014. (wikipedia.org, 2014). All the schools, colleges and universities are distributed along these 20 districts of West Bengal.

The education sector of West Bengal consists of

- Primary schools: Primary education is from class - I to IV. There are about 42624 primary schools in West Bengal as per the 2008 DISE report. (Department of School Education, 2008)
- Secondary schools: Secondary education is from class - V to X. There are about 3589 Secondary schools in West Bengal as per the 2008 DISE report. (Department of School Education, 2008)
- Higher secondary schools: Higher secondary education is from class – XI and XII. There are about 4300 higher secondary schools in West Bengal. (West Bengal Council for Higher Secondary Education)
- Colleges: There are 277 colleges in West Bengal catering to various courses in Agriculture, Arts & Science, Ayurvedic, Catering & Hotel management, Management, Law, Engineering, and Dental etc. (World Colleges Information, 2013)
- Universities: In West Bengal there are about 18 state universities, 1 central university and 1 deemed university. (Educational Information, 2014)
- Professional institutes: In West Bengal the recognized professional institutes are Indian Institute of Technology, Bengal Engineering and

Science University, Indian Statistical Institute, Centre for studies in social sciences, Technical Education and Training Department, Indian Institute for Management.

More than 1, 00, 000 people are employed in the education sector of West Bengal and hence belong to the population of this research.

5.4. SOURCES OF DATA:

Data that is used for this research is collected in two phases.

First phase is the qualitative data which is collected with the help of unstructured interview of respondents who faced and agreed to participate in this research, provided their identity is not disclosed. Purposive sampling is used in this phase to collect the data. This is one of the most common sampling strategies where participants are selected on the basis of criteria relevant to the research questions. Sample sizes which may or may not be fixed prior to data collection, depends on the resources and time available as well as the study's objective. Purposive sample sizes are often determined on the basis of theoretical saturation i.e. the point in data collection when new data no longer bring additional insights to the research question. Purposive sampling is therefore most successful when data review and analysis is done in conjunction with data collection. (Denzin NK, 2000)

The characteristics of these ten respondents are as follow:-

1. Professor and head of the Department in Calcutta University. The respondent is female by gender, belonging to age group of 51 to 60 with more than 15 years of experience in academics.

2. Professor and Dean of IIT, Kharagpur. The respondent is male , belonging to age group of 51 to 60 and has an experience of being in the post of VC of a reputed university.

3. Principal of a private school in Kolkata and was in the news recently for being harassed and even served few days under arrest by the complaint of the parents of the students of the same school. The respondent is a female by gender and belongs to the age group of 41 to 50 years.

4. Retired Principal of another private school in Kolkata. The respondent is above 60 years and is male by gender.

5. Professor of a reputed University in West Bengal. The respondent is male by gender and belongs to the age group of 51 to 60 years.

6. Teacher of a private school in Kolkata. The respondent is female by gender and belongs to the age group of 41 to 50 years.

7. Teacher of a private school in Murshidabad. The respondent is female by gender and belongs to the age group of 31 to 35 years.

8. Retired principal of a government school in Murshidabad. The respondent is male by gender and belongs to the age group above 60.

9. Dean of management school in Kolkata. The respondent is female by gender and belongs to the age group of 41 to 45 years.

10. Faculty of management school in Kolkata. The respondent is male by gender and belongs to the age group of 31 to 40 years.

These respondents were interviewed multiple times to get the rich qualitative data. This qualitative data is used to design the questionnaire for the quantitative research.

The second phase of data was collected from the population of the academicians in whole of West Bengal. The respondents of this survey belonging to 15 universities, 10 colleges, 5 professional institutes and 10 schools. A total of 1664 respondents were approached by sending them the questionnaire through online tools like survey monkey, out of which 567 people have responded. Among them 286 respondents have responded the questionnaire in full. The rest responded in partial and has to be eliminated from analysis. The researcher has personally administered to 80 respondents and collected the data by convenient sampling. Hence the total sample size is 366.

5.5. RESEARCH INSTRUMENT:

The first phase of data collection was done by unstructured face to face interview method, where the interaction was between the researcher as the interviewer and the respondent as the interviewee. In this phase the grounded theory approach is utilized where data is collected and simultaneously analysed which helps in

framing more relevant questions to get rich data. (Charmaz, 2012). In this phase data is collected for the following concepts:

a. Occupational Hazards

b. Impacts of Occupational Hazards

c. Sources of Occupational Hazards

d. Coping strategies.

The type of the questions asked in the unstructured interview is given in Annexure - VI.

The second phase of data collection is done through a structured questionnaire developed by the researcher and personally administered to respondents for responses. Questionnaire was the main research instrument used to analyse the conceptual framework developed through qualitative research. Questionnaire was used as it is economical, structured and appropriate to collect the primary data and test the hypothesis. The final questionnaire used for the research is given in Annexure - I.

5.6. PILOT SURVEY QUESTIONNAIRE:

Initially the questionnaire that was developed by the researcher had five sections. The first section gave their occupational information along with their

demographic details. In this section the respondents gave the following information:

a. Demographic details like age, gender, marital status, education level and earning status.

b. Occupation details like total experience, experience in current organisation, occupational status, organisation category, organisation funded by and position held in the organisation.

The second section is used to identifying the personality traits of the respondent using the MBTI tool which has been licensed to the researcher on application by the CPP Inc.

The third section is used to capture information of the impacts of the occupational hazards faced by asking the respondent to the statements in a seven point Likert scale from Never to Every time. The scale that is used is as follows:-

1. Never, 2. Rarely, 3. Occasionally, 4. Sometimes, 5. Frequently, 6. Usually, 7. Every time.

The fourth section is used to capture information of sources of occupational hazard. Even here 7 point Likert scale was used and the respondents were asked to tick the appropriate option.

The fifth section was used to capture the information of the coping strategies by asking the respondents to answer in a 7 point Likert scale on the 72 statements.

These 72 statements resemble 9 types of coping strategies. The 9 coping strategies are as follows:-Problem Solving, Cognitive Restructuring, Express Emotion, Social Support, Problem Avoidance, Wishful Thinking, Self Criticism, Social Withdrawal and Political.

This has been developed taking the guidance from the Manual CSI Inventory (Tobin D. L., 2001). The way the statements are distributed for the respective coping strategies in shown in Annexure - II. The respondents are asked to tick on the seven point scale from strongly disagree to strongly agree.

5.7. FINAL SURVEY QUESTIONNAIRE:

On the basis of the experience in Pilot survey in administering the questionnaire and also analyzing the data so obtained the questionnaire had to be refined and improved to collect more accurate data. The changes made in the questionnaire are as follows:

a. The questionnaire had to be extended with two more sections. One section is used to capture the information on the stakeholder concepts which was identified in the conceptual framework in detail. The second section was used to capture information on the task concepts.

b. There was change in the way of administering the questionnaire. It was already observed in the pilot survey that many respondents, who initially showed the willingness to respond, withdrew their interest on seeing the

length of the questionnaire. Many respondents displayed sign of disinterest in responding the questionnaire due to its length. Hence part method of administering was used. In this case the questionnaire was divided into three parts i.e. Part A, Part B and Part C. In this case the respondents were asked to respond the questionnaire in individual parts in three times. So that the interest in the topic is also retained giving them the freedom to answer without pressure.

c. Certain wordings had to be changed for the respondents better and clear understanding; keeping in mind the respondents are from India who understands simple English words.

d. Some open ended questions were added to help the respondent to freely answer their perceptions on occupational hazards, stakeholder interactions, or any event related to the topic faced by them.

The questionnaire is given in the Annexure - I.

5.8. RELIABILITY ANALYSIS:

The factors that emerged in the questionnaire for collecting of responses were tested for internal reliability using Chronbach's alpha which indicates the average inter-item correlation within each of the factors. Those factors resulting in Chronbach's alpha of 0.7 or greater are generally considered to be reliable (Tavakol, 2011) and therefore are useful for further analysis as a part of a specific

variable. The Chronbach alpha results are shown in the below mentioned table. Since all the scores are above the basic requirement of 0.7 the factors and there constructs were reliable to go for further analysis.

Table 5.1 Chronbach's Alpha Score for the different constructs of the factors used in the questionnaire.

TABLE 5.1 CHRONBACH'S ALPHA FOR ALL FACTORS IN THE RESEARCH INSTRUMENT

Factors	Constructs	Chronbach's Alpha Score
A. Impact of Occupational Hazard	1. My health suffered due to the problem 2. I had to go to take medicines. 3. My regular work suffered due to the problem. 4. My relationship with colleagues suffered due to the problem 5. My family also got stressed due to the problem. 6. I have emerged totally shaken up from that episode. 7. I suffer from anxiety due to the problem 8. I get tired due to the issues I handle 9. I suffer from injury due to the problem 10. I go into depression due to the problem.	**0.986**
B. Other Sources of Hazard	1. Educational policy or Policy of the Institution 2. Pursuing further education 3. Disciplinary work 4. Guidance work 5. Campus violence 6. Career instability 7. Management issues 8. Work environment 9. Family problem	**0.856**

	10. Organisational politics 11. Students as source 12. Guardians as source 13. Outsiders as source (ex: political parties)	
C. Stakeholder Concept		**0.922**
D. Task Concept	1. I suffer from Job overload 2. I have sufficient Job security 3. I have sufficient control of how to do my work. 4. I like the requirements and characteristics of my job. 5. There are sufficient resources for doing my job satisfactorily. 6. I know what the management expects out of me regarding my work. 7. There are conflicts between different parts of my work. Say teaching and evaluation etc.	**0.731**
E. Coping Strategy		
E.1.Problem Solving	1. I just concentrated on what I had to do next. The next step 2. I changed something so that things would turn out all right 3. I stood my ground and fought for what I wanted. 4. I made plan of action and followed it. 5. I tackled the problem head on. 6. I knew what had to be done, so I doubled my efforts and tried harder to make things work. 7. It was a tricky problem, so I had to work around the edges to make things come out ok. 8. I worked on solving the problems in the situation. 9. I struggled to resolve the problem.	**0.806**
E.2.Cognitive Restructuring	1. I tried to get a new angle on the situation 2. I looked for the silver lining, so	**0.802**

	to speak, tried to look at the bright side of things 3. I told myself things that helped me feel better. 4. I looked at things in different light and tried to make the best of what was available 5. I asked myself what was really important, and discovered that things after all were not so bad. 6. I knew what had to be done, so I doubled my efforts and tried harder to make things work. 7. I stepped back into the situation and put things into perspective. 8. I reorganized the way I looked at the situation, so things didn't look so bad. 9. I went over the problem again and again in my mind and finally saw things in a different light.	
E.3.Express Emotion	1. I found ways to blow off steam 2. I did some things to get it out of my system. 3. I let my emotions go. 4. I let out my feelings to reduce the stress 5. I let my feelings out somehow. 6. My feelings were overwhelming and they just exploded. 7. I got in touch my feelings and then let them go. 8. I was angry and really blew up.	**0.706**
E.4.Social Support	1. I accepted sympathy and understanding from someone 2. I found somebody who was a good listener 3. I talked to someone about how I was feeling. 4. I just spent more time with people I liked. 5. I talked to someone that I was very close to. 6. I let my friends help out.	**0.753**

	7. I asked a friend or relative I respect for advice. 8. I talked to someone who was in similar situation.	
E.5.Problem Avoidance	1. I slept more than usual 2. I went along as if nothing were happening 3. I tried to forget the whole thing. 4. I didn't let it get to me; I refused to think about it too much. 5. I decided that it was really someone else problem and not mine. 6. I avoided the person who was causing the trouble. 7. I made light of the situation and refused to get too serious about it. 8. Every time I thought about it I got upset,; so I just stopped thinking about it.	**0.699**
E.6.Wishful Thinking	1. I hope the problem would take care of itself 2. I hoped a miracle would happen 3. I wished that I never let myself get involved with that situation. 4. I wished that the situation would go away, or somehow be over with. 5. I wished that the situation had never started. 6. I had fantasies or wishes about how things might turn out.. 7. I asked a friend or relative I respect for advice. 8. I wished I could have changed what happened. 9. I thought about fantastic and unreal things that made me feel better.	**0.722**
E.7.Self Criticism	1. I told myself that , if I wasn't so careless things like this wouldn't happen 2. I realized that I brought the problem on myself 3. I criticized myself for what	**0.786**

	happened. 4. I realized that I was personally responsible for my difficulties and really lectured myself. 5. I kicked myself for letting things happen. 6. It was my mistake and I needed to suffer my consequences. 7. I told myself how stupid I was.	
E.8.Social Withdrawal	1. I tried to keep my feelings to myself 2. I spent more time alone. 3. I avoided my family and friends 4. I didn't talk to other people about the problem. 5. I kept my thoughts and feelings to myself. 6. I did not let others know how I was feeling.	**0.687**
E.9.Political	1. I keep in touch with influential people outside my organisation. 2. I used externally influential person to help me. 3. I managed to get more resources to cope with the problem. 4. I approached the senior influential colleagues to help me 5. I got help from the colleagues during the problem 6. I approached influential persons in the organisation to help me	**0.688**

Source: SPSS Statistics 20 output

CHAPTER – 6

6. DATA ANALYSIS AND INTERPRETATION

6.1. OVERVIEW:

The primary data collected during the pilot survey and the final survey, through questionnaires, was edited, coded and analyzed using IBM SPSS 22.0 software. Pilot survey data is analysed for corrections and modifications of the questionnaire. The final data analysis is presented in detail in section – II of this chapter. Data analysis is presented in two sections. Section – I deals with qualitative data analysis and section – II deals with quantitative data analysis.

6.2. SECTION – I ANALYSIS OF QUALITATIVE DATA:

The qualitative data was collected through unstructured interview of ten respondents occupying different positions in the organisations belonging to the education sector of West Bengal. The original plan was to collect the data of occupational hazards, sources of these hazards and the coping strategies adopted by the respondents working in the education sector of West Bengal as letting the respondents to “speak for themselves” and to hear “the people voice”.

Before analyzing the qualitative data the interview transcripts were read carefully and making comments in the margin about key patterns, themes and issues in the data. A theme is a broad category or topic. The data is read several times before it is completely coded. A code is a way of organizing the data in terms of its subject matter. The codes are then used to organise data into specific categories. The major themes that have emerged from the data are divided into four categories like occupational hazards faced, sources of these hazards, coping strategies adapted and factors influencing the coping strategies. The categories and respective themes are presented below.

6.2.1.1. THEME – 1 - OCCUPATIONAL HAZARD:

This theme represents the respondent's views on the various situations in their jobs which made them unpleasant or uncomfortable, satisfying the definition of the term "occupational hazard". The sub themes that were identified under this are 1) Burnout (mostly all the ten participants commented on this), 2) Campus Violence (eight participants commented and accepted this as a usual phenomena at the time of examination or college elections), 3) Stress (almost nine participants commented on this speaking of having jobs other than teaching or heavy workload) and 4) False accusation (six participants commented on this being caused by the organisation politics).

6.2.1.2. THEME- IMPACT OF OCCUPATIONAL HAZARD:

This theme represents the respondent's comments on how those unpleasant situations impacted them individually. To this most of them viewed that their health got affected and they had to take the help of medication because of such unpleasant situations. Nearly eight out of ten participants commented of sleeplessness, exhaustion, and boredom and losing interest in the job. Six of them complained about these unpleasant situations have even damaged their relationships with their colleagues. Five of them complained of disturbance between wok – home balance.

6.2.1.3. THEME- FACTORS INFLUENCING OCCUPATIONAL HAZARD:

This theme represents the respondent's perceptions as to what factors influence the occupational hazards. This theme identified three categories of subthemes.

The first subtheme that emerged was the organisational related concepts. The respondents perceived that the variables like organisational policies, management issues, job profile, job security, organisational politics, students, parents and outsiders like political parties interfacing with the employees and disturbances in family caused the occupational hazards.

The second subtheme that emerged was about stakeholder related concepts. In this the stakeholder multiplicity level, stakeholder complexity level, stake holder

interface and stakeholder administrations were very important in creating the hazards.

The third subtheme that emerged was the task related concepts. The respondents commented on the task complexity, task ambiguity and task description.

6.2.1.4. THEME- COPING STRATEGIES:

This theme represents the respondent's methods of coping when faced with the occupational hazards. Five subthemes were identified under this category.

6.2.1.4.1. SUBTHEME – UNDERESTIMATION OF THE PROBLEM – AVOIDANCE:

The subtheme represented the respondents comment about the initial phase of the hazard process when the unpleasantness has just started. It also includes the respondent's behavior and attitudes about the unpleasant situation. In this initial phase, negative acts in most cases were generally subtle and work related, like withholding vital information from the respondent or someone else taking the credit of respondents achievement. All respondents have been in this first phase and reported that they could not figure out what was going on and assumed a passive, emotion focused attitude towards the hazard. Some used avoidance strategies like trying to stay away from the hazard. Others blamed themselves

adapting self-criticism strategies and worked harder to avoid the accusations and negligence or questioned themselves as to what wrong they had done. The third group pretended to ignore the hazard by using humour as a coping strategy. In this phase they did not ask the support of others or confront the hazard. However underestimation or avoidance strategies did not help to end the hazard on the contrary escalated it.

6.2.1.4.2. SUBTHEME – LOSING PATIENCE – CONFRONTATION:

This subtheme represents the type of the behavior that caused the respondents to lose their patience and the varying strategies to deal with such hazards. In the second phase the frequency and the intensity of the hazard increased. The respondent encountered work-related hazard such as unmanageable task, person related hazard like loud voice criticism, humiliation in front of others, insulting comments and threats of violence. Accordingly it can be stated that confronting strategies alone were not affective in stopping the hazard on contrary aggravated it.

6.2.1.4.3. SUBTHEME – PERCEIVING THREATS TO PERSONAL HEALTH – SEEKING SUPPORT:

This subtheme included the respondent's physiological and psychological health complaints related with their experiences and their various coping strategies that

helped to stop or aggravate the hazard process. All the respondents had been through this phase and suffered a range of health related problems that included loss of appetite, sleeplessness, nightmares, headaches and fatigues. Seeking social support was a common coping mechanism reported in this evolving phase. It included emotion-focused coping strategy like talking with friends and family members to restore their morale. In addition respondents sought advocacy support such as asking the support of colleagues to cope with the hazards. Another problem focused strategy used in this phase was seeking support by talking to a superior or filing formal complaint to the authorities of the organisation. These strategies to maximum extent reduced the impact of the hazards.

6.2.1.4.4. SUBTHEME – DESPAIR – DESTRUCTIVE COPING:

This subtheme explored the fourth phase of the hazard process and included the respondents' narrative about how they felt unable to cope with the hazard and felt hopeless. In this phase the respondent's level of tolerance to the hazard is determined to be its lowest due to their absence of energy and resource to cope. Thereby they tried adopting emotion-focused strategies like exhibiting withdrawal or attacking behavior. Withdrawal behavior could be like ignoring non-essential tasks, taking sick leaves, leaving some tasks undone and going to work late or leaving early intentionally.

6.2.1.4.5. SUBTHEME – GIVING UP – EXIT:

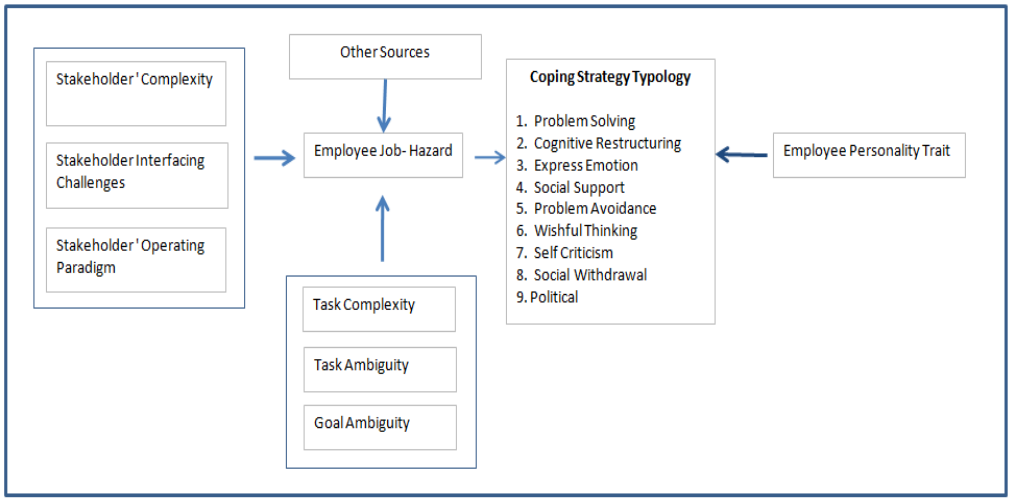
This subtheme included the respondent's final reaction that aimed to end the hazards like resigning, planning to resign or requesting to transfer to another branch or department or location. This phase determined to be the final phase of the hazard process. After trying various coping strategies unsuccessfully, respondents had accepted that there was no sense in striving, so they gave up.

6.2.1.5. THEME- FACTORS INFLUENCING COPING STRATEGIES:

This theme was developed on the respondents perception of what could be the factor that made them to adapt to a specific strategy. To this all the ten respondents commented that their experience and their personality made them adapt to a specific coping strategy.

Results of the qualitative analysis indicated the respondent's views and comments on the occupational hazards, impact of these hazards, factors escalating or de-escalating the hazards, coping strategies adapted and the factors influencing the respondent to adapt a specific coping strategy. Based on these findings a conceptual framework has been developed.

FIGURE 6.1 CONCEPTUAL FRAMEWORKS FOR RESEARCH



The qualitative analysis is used as a precursor to quantitative analysis. The instrument for research has been designed keeping the findings of the qualitative analysis and the conceptual framework developed. The data is now analysed quantitatively through statistical analysis like ANOVA and regression analysis.

6.3. SECTION – II ANALYSIS OF QUANTITATIVE DATA:

Data was collected through a detailed questionnaire, which was administered to the respondents working in the education sector of West Bengal. The complete questionnaire is presented in Annexure – I. The questionnaire is used to capture the information of the respondent's demographic profile, organisational details, personality trait, impact of occupational hazard, source of occupational hazard, stakeholder information, task information and coping strategies adopted. The definition for each of these constructs are given below -

- Demographic profile like gender, age group, marital status, educational level, earning status
- Organisational details like academic experience, work experience in current organisation, organisation type, organisation funding agency, position held in the current organisation
- Personality trait captured through MBTI instrument
- Impact of occupational hazard information captured through ten variables measured through 7-point Likert scale (1.Never, 2.Rarely, 3.Occassionally, 4.Sometimes, 5.Frequently, 6.Usually, 7.Everytime). The ten variables are :-

    1. Got stressed due to the problem. My health suffered due to the problem.
    2. I had to go to take medicines.
    3. My regular work suffered due to the problem.
    4. My relationship with colleagues suffered due to the problem.
    5. My family also got stressed due to the problem.
    6. I have emerged totally shaken up from that episode.
    7. I suffer from anxiety due to the problem.
    8. I get tired due to the issues I handle.

9. I suffer from injury due to the problem

10. I go into depression due to the problem.

- Source of occupational hazard information is captured through thirteen variables measured through 7-point Likert scale (1.Strongly Disagree, 2.Disagree, 3.Somewhat Disagree, 4.Neither Agree nor Disagree, 5.Somewhat Agree, 6.Agree, 7.Strongly Agree). Thirteen variables are:-
    1. Educational policy or Policy of the Institution
    2. Pursuing further education
    3. Disciplinary work
    4. Guidance work
    5. Campus violence
    6. Career instability
    7. Management issues
    8. Work environment
    9. Family problem
    10. Organisational politics
    11. Students as source
    12. Guardians as source
    13. Outsiders as source (ex: political parties)
- Stakeholder Information captured through twenty eight variables measured through 7-point Likert scale (1. Strongly Disagree, 2.Disagree, 3.Somewhat Disagree, 4.Neither Agree Nor Disagree, 5.Somewhat Agree,

6.Agree, 7.Strongly Agree) except for the first three variables, First and third variables has response either yes or no. The second variable has a descriptive response for qualitative data. The twenty eight variables are :-

1. Did you have an opportunity to interact with the different stakeholders regarding any administrative issue? (Either Yes or No)
2. What was the issue regarding which you interacted? (Descriptive Answer)
3. Regarding the issue or multiple issues for which you had to interact, did you interact with multiple offices/ departments or office bearers for dealing with different issues in your employer organisation? (Either Yes or No)
4. In your organisation, for administrative issues, do you know whom to approach for, so that you will not have to run around for resolution of the problem?
5. In your organisation, processes for dealing with different administrative issues are well laid out and known to all employees.
6. In your organisation, processes for dealing with different administrative issues are known to you personally.
7. In your organisation, for obtaining resources for teaching or academic related activities. You know whom to approach.

8. In your organisation, the processes of obtaining resources for teaching or academic related activities are well laid out and known to all employees.
9. In your employer organisation, the processes for obtaining resources for teaching or academic related activities are known to you personally.
10. In your organisation, for dealing with student indiscipline do you know whom to approach,
11. In your organisation, for dealing with student indiscipline a proper system is well laid out and known to all employees.
12. In your organisation, processes for dealing with student indiscipline are known to you personally.
13. In your organisation, for handling parents' queries, you know whom to approach.
14. In your organisation, processes for handling parents queries are well laid out and known to all employees.
15. In your organisation, processes for handling parents' queries are known to you personally.
16. In your organisation, for handling outside interferences, you know whom to approach.
17. In your organisation, processes for handling outside interferences are well laid out and known to all employees.

18. In your organisation, processes for handling outside interferences are known to you personally.
19. In your organisation, for handling students groups/ unions, You know whom to approach.
20. In your organisation, for handling different student's groups/ unions strategies are well laid out and known to all employees.
21. In your organisation, for handling different students groups/ unions strategies are known to you personally.
22. There are certain unstated rules and expectations which dealing with different offices/ officials.
23. Policies and rules are followed consistently.
24. There is lot of unnecessary formality in working with the offices/ officials/ departments.
25. There is power hierarchy maintained during working with the officials and during interactions.
26. Officers/ departments communicate their requirements in clear and unambiguous terms.
27. It requires multiple follow-ups to get the work done.
28. The language different position holders' use is confusing sometimes in terms of the meaning.

- Task related information is captured through seven variables measured through 7-point Likert scale (1. Strongly Disagree, 2.Disagree,

3.Somewhat Disagree, 4.Neither Agree Nor Disagree, 5.Somewhat Agree, 6.Agree, 7.Strongly Agree). The seven variables are:-

1. I suffer from Job overload.
2. I have sufficient Job security.
3. I have sufficient control of how to do my work.
4. I like the requirements and characteristics of my job.
5. There are sufficient resources for doing my job satisfactorily.
6. I know what the management expects out of me regarding my work.
7. There are conflicts between different parts of my work. Say teaching and evaluation etc.

- Coping strategy information is collected with the help of the Coping Strategy Inventory (CSI) Tool developed by David L. Tobin in 2001. The CSI consists of 72 item self-report questionnaire designed to assess the coping thoughts and behavior in response to specific stressors. The responses are captured in a 7-point Likert scale (1. Strongly Disagree, 2.Disagree, 3.Somewhat Disagree, 4.Neither Agree Nor Disagree, 5.Somewhat Agree, 6.Agree, 7.Strongly Agree). The 72 items are distributed into primarily nine sub scale of this inventory. The distribution of items into sub scales are

    1. Problem Solving consisting of 9 items.
    2. Cognitive Restructuring consisting of 9 items.
    3. Express Emotion consisting of 8 items.

4. Social Support consisting of 8 items.
5. Problem Avoidance consisting of 8 items.
6. Wishful Thinking consisting of 9 items.
7. Self Criticism consisting of 7 items..
8. Social Withdrawal consisting of 6 items.
9. Political consisting of 6 items..

The distributions of data from these sources are presented in the table 6.1.

Table 6.1 Distributions of Respondents Among Different Organisation Types

Organisation Type	Code	N	Percentage
Primary School	0	10	2.79%
Secondary School	1	10	2.79%
Higher Secondary School	2	46	12.85%
College	3	74	20.67%
University	4	172	50.84%
Professional Institute	5	46	12.85%
Others	6	0	

The questionnaire was administered personally and also through mail. The data collected personally by the researcher herself from 120 respondents belonging to the schools, colleges and universities in and around Kolkata. The data of respondents outside Kolkata was collected through mail using the online tool (Survey Monkey). The total data collected through mail were around 350. Out of which 238 data was recovered eliminating the partial filled forms and non response questions. So the total data that is being analyzed is 366. The 120 respondent's data was collected from schools, colleges and universities from Kolkata, Bardhaman, Murshidabad and Howrah Districts. The remaining of 238

respondents' data was collected from other 16 districts of West Bengal through administering questionnaire through mail using survey monkey.

6.3.1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS:

The description of demographic profile of the respondents is shown in the tables below on the basis of their Gender, Age group, Marital Status, Educational Level and Earning Status.

Table 6.2 Male & Female Respondents Distribution

Gender	Code	N	Percentage
Male	0	182	51%
Female	1	176	49%

Table 6.3 Gender Vs Age Group

Gender/Age Group	21 – 30	31 – 40	41 – 50	51 – 60	Above 60	Total
Code	0	1	2	3	4	
Male	2	40	44	64	32	182
Female	8	64	52	46	6	176
Total	10	104	96	110	38	358

Table 6.4 Gender Vs Marital Status

Gender/Marital Status	Unmarried	Married	Divorcee	Widow	Total
Code	0	1	2	3	
Male	4	174	4	0	182
Female	21	139	7	9	176
Total	25	313	11	9	358

Table 6.5 Gender Vs Education Level

Gender/Education Level	Graduate	Post Graduate	Post Graduate +	Doctorate	Total
Code	0	1	2	3	
Male	0	27	15	140	182
Female	7	73	20	76	176
Total	7	100	35	216	358

TABLE 6.6 GENDER VS EARNING STATUS

Gender/Earning Status	Sole Earner	Shared Earner	Total
Code	0	1	
Male	119	63	182
Female	49	127	176
Total	168	190	358

6.3.1.1. INTERPRETATION OF DEMOGRAPHIC PROFILE OF THE RESPONDENTS:

The demographic profile of the respondents was analyzed and it was found that the composition of the respondents in context of the gender is male (51%) and female (49%). Hence the respondents' data is not inclined towards any gender. The age groups that are significantly present in the data are between 31 to 60 years as the percentage population of 31 – 40 years is 29%, from 41 – 50 years it is 26.8% and that of 51 – 60 years it is 30.7%. Hence data with the context of age groups are also proportionately distributed in the research eliminating biasness. With respect to the marital status it was found that the data consists of

significantly high married respondents whose percentage is 87%. With respect to the educational level of the respondents the data is highly inclined towards Doctorate being 59.8% of data and Post Graduates being nearly about 38% of respondents. This proportion is quite adequate since in the academic environment every person working in this sector aspires for to achieve the highest level of education. The earning status of the respondents was also analyzed and it was found that the respondents who are sole earners occupied 45.25% of respondents and those of shared earners occupied 54.75% of respondents. The shared earners meant that both the partners were earning members of the family as a result of which the sustenance of the family is not dependent on a single earning member. The data in this case is also quite proportionately distributed along the research.

Based on the data collected from the respondents working in the education sector of West Bengal we can say that the populations of male and female respondents working are quite close and the age group where the population is highly dense is between 31 – 60 years. Nearly 87% of the populations in this sector are married. As of the educational levels it is obtained that nearly 40 % of the respondents are Post Graduates and 60% are Doctorates working in this sector. Though the shared earners are outnumbering the sole earners, the distribution of the population is nearly equal as to the respondents' earning status is concerned.

6.3.2. OCCUPATIONAL PROFILE OF THE RESPONDENTS:

In the Occupational Profile of the respondents the variables that are considered are Academic Experience, Mode of Working, Organisation Type, Funding mode of the Organisation and the Current Position held in the organisation. The data is represented in the form of tables shown below:-

Table 6.7 Gender Vs Academic Experience

Gender/Academic Experience in years	Less than 1	1 – 5	6 – 10	11 – 15	Greater than 15	Total
Code	0	1	2	3	4	
Male	0	13	21	77	71	182
Female	0	10	45	59	62	176
Total	0	23	66	136	133	358

Table 6.8 Gender Vs Mode Of Working

Gender/Mode of Working	Permanent	Visiting	On Probation	Retired	Total
Code	0	1	2	3	
Male	166	3	4	9	182
Female	161	5	3	7	176
Total	327	8	7	16	358

Table 6.9 Gender Vs Organisation Type

Gender/Organisation Type	Primary School	Secondary School	Higher Secondary School	College	University	Professional Institute	Others	Total
Code	0	1	2	3	4	5	6	
Male	5	0	4	20	116	32	0	182
Female	5	10	44	55	54	13	0	176
Total	10	10	48	75	170	45	0	358

Table 6.10 Funding Body Vs Organisation Type

Funding Body/Organisation Type		Primary School	Secondary School	Higher Secondary School	College	University	Professional Institute	Others	Total
Code		0	1	2	3	4	5	6	
Government	**0**	5	0	4	4	8	0	0	16
Aided by Government	**1**	0	2	14	59	150	8	0	243
Private	**2**	5	8	30	12	12	37	0	99
Total		10	10	48	75	170	45	0	358

Table 6.11 Gender Vs Position Held

Gender/Organisation Type	Others	Librarian	Teacher	Researcher	Professor	Admin	Head	Total
Code	0	1	2	3	4	5	6	
Male	6	4	24	0	128	6	14	182
Female	0	4	66	0	90	6	10	176
Total	6	8	90	0	218	12	24	358

6.3.2.1. INTERPRETATION OF OCCUPATIONAL PROFILE OF THE RESPONDENTS:

The Occupational Profile with respect to the variables like Academic Experience in years, Mode of Working in the Organisation, Type of Organisation, Funding Body of Organisation and Position Held in the Organisation were analyzed for the respondents. It was found that 38.6 % of respondents belonged to the group of 11 to 15 years of academic experience trailing these 36 % respondents belonged to the group of academic experience above 15 years. Since the impact of occupational hazard in this sector is quite slow and takes time to reveal the symptoms the data is densely populated in the group of academic experience

greater than 6 years which is about 92.81 %. In the context of Mode of Working the data of permanently employed respondents were considered where the respondent's population is about 91 %. Though temporarily employed and retired respondents were also considered at 4 % and 5 % of respondents to analyse for variations in the data. Near about 50% respondents belonged to be working in the universities and about 15 % respondents belonged to secondary and higher secondary schools. About 13 % respondents belonged to the professional institutes like Indian Institute of Management, Kolkata, Indian Institute of Technology, Kharagpur and also few private management schools in and around Kolkata. 67 % of organisations in this sector are aided by government and approximately 28 % of the organisations are run privately which was considered for this research. Nearly 61% of respondents worked in the position of professor and 25 % worked in the position of teachers. To analyse the variance among the positions 8% of respondents working as head of the organisation or department and 3 % of respondents working as administrators were also considered.

6.3.3. PERSONALITY TRAITS OF THE RESPONDENTS:

To analyse and identify the Personality Traits of the respondents MBTI tool is used with the permission from CPP Inc... The score key as used by Harley Friedman and advised by Nancy Schaubhut, M.S, Program coordinator of CPP Inc is attached in the Annexure – III.The response was analysed with the score key and the results are given in the Table 6.12.

Table 6.12 Personality Trait Vs Gender

S.No	Personality Trait	Abbreviation	Code	Male	Female	Total
1	Extraverted iNtuitive Feeling Judging	ENFJ	0	12	12	24
2	Extraverted iNtuitive Thinking Judging	ENTJ	1	6	0	6
3	Extraverted iNtuitive Feeling Perceiving	ENFP	2	2	0	2
4	Extraverted iNtuitive Thinking Perceiving	ENTP	3	2	0	2
5	Extraverted Sensing Feeling Judging	ESFJ	4	2	12	14
6	Extraverted Sensing Feeling Perceiving	ESFP	5	0	2	2
7	Extraverted Sensing Thinking Judging	ESTJ	6	102	90	192
8	Extraverted Sensing Thinking Perceiving	ESTP	7	0	0	0
9	Introverted iNtuitive Feeling Judging	INFJ	8	4	4	8
10	Introverted iNtuitive Feeling Perceiving	INFP	9	14	8	22
11	Introverted iNtuitive Thinking Judging	INTJ	10	10	8	18
12	Introverted iNtuitive Thinking Perceiving	INTP	11	4	4	8
13	Introverted Sensing Feeling Judging	ISFJ	12	0	10	10
14	Introverted Sensing Feeling Perceiving	ISFP	13	2	0	2
15	Introverted Sensing Thinking Judging	ISTJ	14	20	26	46
16	Introverted Sensing Thinking Perceiving	ISTP	15	2	0	2
Total				182	176	358

To understand the data more thoroughly a histogram is drawn out of the data.

FIGURE 6.2 PERSONALITY TRAIT VS GENDER

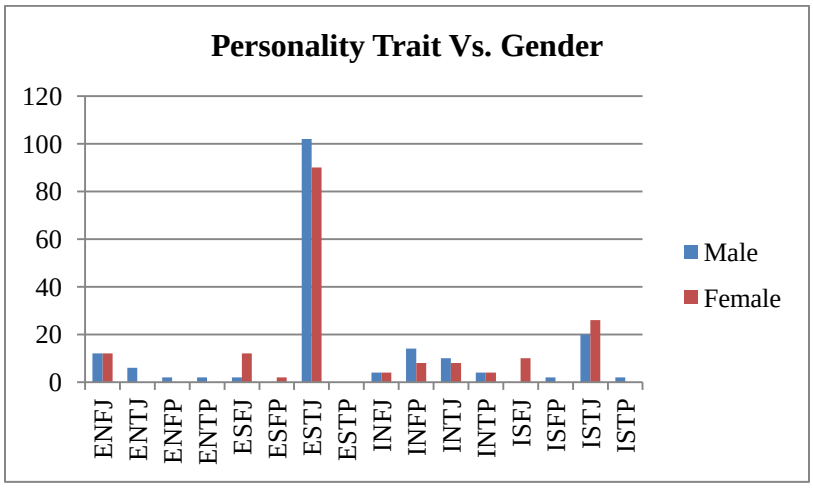
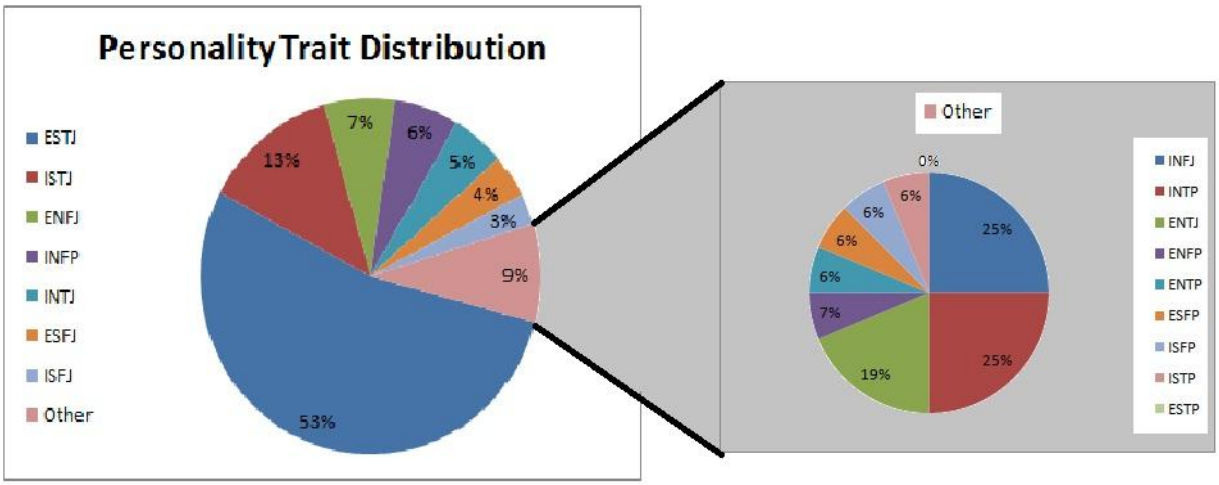


FIGURE 6.3 PERSONALITY TRAIT DISTRIBUTIONS



6.3.3.1. INTERPRETATION OF PERSONALITY TRAITS OF THE RESPONDENTS:

The data contains maximum respondents having the Personality trait as Extraverted Sensing Thinking judging i.e. ESTJ. The next highest number of respondents belong to the Personality trait Introverted Sensing Thinking Judging i.e. ISTJ. The psychological functions that are dominant in the respondents employed in the education sector of West Bengal are sensing, thinking and judging irrespective of either they are extroverts or introverts. Moreover the extroverts in this sector outnumber the Introverts.

6.3.4. ANALYSIS OF IMPACT OF OCCUPATIONAL HAZARDS:

The analysis of the concept (impact of occupational hazards) on the respondents working in the education sector of West Bengal is done with respect to the

variables like Gender, Age Group, Marital Status, Educational Level, Earning Status, Respondents Working in different Working modes, Respondents having different Academic Experience, Respondents Working in different Organisation Types, Respondents working in organisations Funded by different Funding Bodies, Respondents working in different Positions held in the Organisation and Respondents with different Personality Traits.

For all these variables hypothesis is formulated and the hypothesis is tested through One Way Analysis Of Variance (ANOVA). The hypotheses and their tests are presented below:-

6.3.4.1. NULL HYPOTHESIS - H_{01}:

Null Hypothesis - H_{01}: There is no significant difference in the impact of occupational hazards among the male and female respondents.

For testing this hypothesis One-Way Analysis of Variance is applied on the Data for the means of impact of occupational hazard among the two groups i.e. the male and female respondents working in education sector of West Bengal.

Table 6.13 Anova between Male and Female

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.196	1	2.196	1.050	.306
Within Groups	740.154	354	2.091		
Total	742.350	355			

It is very much evident from the table 6.13 that the F – value is not significant since Sig is 0.306 is greater than 0.05. Hence we retain the null hypothesis H_{01}.

6.3.4.1.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is greater than the cutoff value i.e. 0.05. This means that there is no significant difference between the impacts of the occupational hazards among the male and female respondents of this study. The impact is practically same for both the female and male employees with regards to the facing unpleasantness in their jobs.

6.3.4.2. NULL HYPOTHESIS - H_{02}:

Null Hypothesis - H_{02}: There is no significant difference in the impact of occupational hazards among the different age groups of the respondents.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the different age groups of the respondents working in education sector of West Bengal.

Table 6.14 Anova between Age Groups

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	57.724	4	14.431	7.412	.000
Within Groups	687.244	353	1.947		
Total	744.968	357			

It is very much evident from the table 6.14 that the F – value is highly significant since Sig is 0.000 which is less than 0.05. Hence we retain the alternate hypothesis $H_{A2..}$

6.3.4.2.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference among the means of the impact of occupational hazard between the different age groups of the respondents of this study. It is clear from the table that age is an important parameter in deciding the impact of the occupational hazard on the employees.

6.3.4.3. NULL HYPOTHESIS - H_{03}:

Null Hypothesis - H_{03}: There is no significant difference in the impact of occupational hazards among the different marital status of the respondents.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the different marital status of the respondents working in education sector of West Bengal.

Table 6.15 Anova between Marital Statuses

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.417	3	.139	.066	.978
Within Groups	744.551	354	2.103		
Total	744.968	357			

It is very much evident from the table 6.15 that the F – value is not significant since Sig is 0.978 is greater than 0.05. Hence we retain null hypothesis H_{03}.

6.3.4.3.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well above the cutoff value i.e. 0.05. This means that there is no significant difference among the means of the impact of occupational hazard between the different marital statuses of the respondents of the study.

6.3.4.4. NULL HYPOTHESIS - H_{04}:

Null Hypothesis - H_{04}: There is no significant difference in the impact of occupational hazards among the different educational level of the respondents.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the different educational level of the respondents working in education sector of West Bengal.

Table 6.16 Anova between Education Levels

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.896	3	10.965	5.451	.001
Within Groups	712.072	354	2.012		
Total	744.968	357			

It is very much evident from the table 6.16 that the F – value is highly significant since Sig is 0.001 which is less than 0.05 Hence we retain the alternate hypothesis $H_{A4..}$

6.3.4.4.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference among the means of the impact of occupational hazard between the respondents with different educational levels.

6.3.4.5. NULL HYPOTHESIS - H_{05}:

Null Hypothesis - H_{05}: There is no significant difference in the impact of occupational hazards among the different earning status of the respondents.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the different earning status of the respondents working in education sector of West Bengal.

Table 6.17 Anova between Earning Status

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27.921	1	27.921	13.862	.000
Within Groups	717.047	356	2.014		
Total	744.968	357			

It is very much evident from the table 6.17 that the F – value is highly significant since Sig. is 0.000 which is less than 0.05. Hence we retain the alternate hypothesis H_{A5}.

6.3.4.5.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference among the means of the impact of occupational hazard between the respondents with different earning status.

6.3.4.6. NULL HYPOTHESIS - H_{06}:

Null Hypothesis - H_{06}: There is no significant difference in the impact of occupational hazards among the respondents working in different Working Modes.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents working in different Working Modes in the education sector of West Bengal.

Table 6.18 Anova between Working Modes

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.024	3	5.008	2.429	.065
Within Groups	729.944	354	2.062		
Total	744.968	357			

It is very much evident from the table 6.18 that the F – value is not significant since Sig. is 0.065 is greater than 0.05. Hence we retain the null hypothesis H_{06}.

6.3.4.6.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is above the cutoff value i.e. 0.05 which is 0.065. This means there is significant difference among the means of the impact of occupational hazard between the respondents working in different Working Modes at the significant level 0.065.

6.3.4.7 NULL HYPOTHESIS - H_{07}:

Null Hypothesis - H_{07}: There is no significant difference in the impact of occupational hazards among the respondents working with different Academic Experience.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents working different Academic Experience in the education sector of West Bengal.

Table 6.19 Anova between Academic Experiences

Impact of occupational hazard

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	44.779	3	14.926	7.546	.000
Within Groups	700.189	354	1.978		
Total	744.968	357			

It is very much evident from the table 6.19 that the F – value is highly significant since Sig. is 0.000 which is less than 0.05 Hence we retain the alternate hypothesis H_{A7}.

6.3.4.7.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference among the means of the impact of occupational hazard between the respondents working with different Academic Experience.

6.3.4.8. NULL HYPOTHESIS - H_{08}:

Null Hypothesis - H_{08}: There is no significant difference in the impact of occupational hazards among the respondents working in different Organisation Types.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents working in different Organisation Types in the educational sector of West Bengal

Table 6.20 Anova between Organisation Types

Impact of occupational hazard

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	83.001	4	20.750	11.065	.000
Within Groups	661.967	353	1.875		
Total	744.968	357			

It is very much evident from the table 6.20 that the F – value is highly significant since Sig. is 0.000 which is less than 0.05. Hence we retain the alternate hypothesis $H_{A8.}$

6.3.4.8.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference among the means of the impact of occupational hazard between the respondents working in different Organisation Types.

6.3.4.9. NULL HYPOTHESIS - H_{09}:

Null Hypothesis - H_{09}: There is no significant difference in the impact of occupational hazards among the respondents working in Organisations Funded by different Funding Bodies.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents working in Organisations Funded by different Funding Bodies in the education sector of West Bengal.

Table 6.21 Anova between Funding Bodies

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.876	3	18.959	9.754	.000
Within Groups	688.092	354	1.944		
Total	744.968	357			

It is very much evident from the table 6.21 that the F – value is highly significant since Sig. is 0.000 which is less than 0.05. Hence we retain the alternate hypothesis H_{A9}.

6.3.4.9.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference in the means of the impact of occupational hazards among the respondents working in Organisations Funded by different Funding Bodies.

6.3.4.10. NULL HYPOTHESIS - H_{010}:

Null Hypothesis - H_{010}: There is no significant difference in the means of the impact of occupational hazards among the respondents working in different Positions in the Organisations.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents working in different Positions in the Organisations in the education sector of West Bengal.

Table 6.22 Anova between Positions Held

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.238	5	7.248	3.729	.003
Within Groups	336.246	173	1.944		
Total	372.484	178			

It is very much evident from the table 6.22 that the F – value is highly significant since Sig. is 0.003 which is less than 0.05 Hence we retain the alternate hypothesis $H_{A10.}$

6.3.4.10.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well below the cutoff value i.e. 0.05. This means there is significant difference in the means of the impact of occupational hazards among the respondents working in different Positions in the Organisations.

6.3.4.11. NULL HYPOTHESIS - H_{011}:

Null Hypothesis - H_{011}: There is no significant difference in the impact of occupational hazards among the respondents possessing different Personality Traits.

For testing this hypothesis One-Way Analysis of Variance is applied on the data of the means of impact of occupational hazard among the respondents possessing different Personality Traits working in the education sector of West Bengal.

Table 6.23 Anova between Personality Traits

Impact of occupational hazard

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.857	14	3.061	1.495	.110
Within Groups	702.111	343	2.047		
Total	744.968	357			

It is very much evident from the table 6.23 that the F – value is not significant since Sig. is 0.110 which is greater than 0.05. Hence we retain the null hypothesis $H_{011.}$

6.3.4.11.1. INTERPRETATION:

The statistical analysis suggests that the significance value obtained is well above the cutoff value i.e. 0.05. This means there is no significant difference in the means of the impact of occupational hazards among the respondents possessing different Personality Traits.

6.3.4.12. ANALYSIS OF THE PREDICTORS OF THE IMPACT OF OCCUPATIONAL HAZARD:

On analyzing the variables like Gender, Age group, Marital Status, Educational Level, Earning Status, Working Modes, Academic Experience, Organisation Type, Funding bodies of the Organisation, Position held in the organisation and Personality Traits of the respondents. The table 6.24 was obtained regarding the variables which made significant impact of occupational hazard on the respondents.

Table 6.24 Summary of Hypothesis on Impact of Occupational Hazard

Dependent Variable	Hypothesis	Retain	Independent Variable	Variable	Significance
Impact of Occupational Hazard (Y_1)	H_{01}	Yes	Gender	X1	Not Significant
	H_{02}	No..	Age Group	X2	Highly significant
	H_{03}	Yes	Marital Status	X3	Not Significant
	H_{04}	No	Educational Level	X4	Highly Significant
	H_{05}	No	Earning Status	X5	Highly Significant
	H_{06}	Yes	Working Modes	X6	Not Significant
	H_{07}	No	Academic Experience	X7	Highly Significant
	H_{08}	No	Organisation Types	X8	Highly Significant
	H_{09}	No	Funding Bodies	X9	Highly Significant
	H_{010}	No	Position Held	X10	Highly Significant
	H_{011}	Yes	Personality Traits	X11	Not Significant

On the basis of the table 6.24 we can assume a linear equation for obtaining the Impact of occupational hazard as:

$Y_1 = K + B2X2 + B4X4 + B5X5 + B6X6 + B7X7 + B8X8 + B9X9 + B10X10.$

With this assumption that there exists a linear relation among the variables X2, X4, X5, X6, X7, X8, X9, X10 we can formulate the following null hypothesis.

6.3.4.12.1. NULL HYPOTHESIS - H_{012}:

Null Hypothesis - H_{012}: There is no linear relation existing among the variables X2, X4, X5, X6, X7, X8, X9, and X10.

Which means H_{012}: B2 = B4 = B5 = B6 = B7 = B8 = B9 = B10 = 0

To test this hypothesis we apply linear regression analysis through IBM SPSS Statistics 20.

The result obtained is as follows:

Table 6.25 Variable Used To Predict the Impact of Occupational Hazard (Iohm)

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	positionheld, workmode, earningstatus, academicexperience, funding body, organisationtype, educationlevel, agegroup[b]	.	Enter

a. Dependent Variable: iohm

c. All requested variables entered.

From the Table 6.25 it is quite evident that all the 8 variables i.e. position held, work mode, earning status, academic experience, funding body, organisation type, education level and age group useful in predicting the impact of occupational hazard on the respondents working in the education sector of West Bengal.

Table 6.26 Impact of Occupational Hazard Model 1 Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.372[a]	.138	.118	1.36965

a. Predictors: (Constant), positionheld, workmode, earningstatus, academicexperience, fundingbody, organisationtype, educationlevel and agegroup

The Table 6.26 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.138 which means the linear equation explains the 13.8 % of the variance in the data.

Table 6.27 Anova among the Predictors of Impact Of Occupational Hazard In Model 1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.253	8	12.657	6.747	.000[b]
	Residual	632.190	337	1.876		
	Total	733.443	345			

a. Dependent Variable: iohm

b. Predictors: (Constant), positionheld, workmode, earningstatus, academicexperience, fundingbody, organisationtype, educationlevel and agegroup

The ANOVA table 6.27 gives the significant value of 0.000. Hence the F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.28 Coefficients Of The Predictors Of Ioh Model 1a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.612	.481		3.354	.001
	agegroup	.173	.111	.122	1.566	.118
	educationlevel	.108	.112	.069	.958	.339
	earningstatus	-.497	.156	-.170	-3.177	.002
	academicexperience	.264	.116	.161	2.282	.023
	workmode	-.264	.119	-.118	-2.214	.027
	organisationtype	.021	.102	.014	.209	.834
	fundingbody	-.118	.117	-.056	-1.008	.314
	positionheld	.004	.072	.003	.050	.960

The Table 6.28 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that earning status of the respondent and academic experience of the respondent are significant predictors of impact of occupational hazard on the respondent. We can also say that as earning status inversely affects the impact of occupational hazard on the respondent. Secondly we find that the variable Earning Status of the respondent has higher impact than the variable academic experience of the respondent.

On the basis of the obtained statistical analysis result we retain the alternate hypothesis $H_{A12.}$ According to our statistical analysis the linear equation for the impact of occupational hazard is given by

$\mathbf{Y_1 = 1.612 - 0.497}$ earningstatus **+ 0.264** academicexperience **- 0.264** workmode

On the basis of the significant value from the table 6.28 we can say that the coefficients earning status, academic experience and working mode will never be zero since their significant value is less than 0.05. But the coefficients of other variables may be zero.

6.3.4.12.1.1. INTERPRETATION:

The linear model explains that the impact of occupational hazard can be predicted by the variables in the order of their significance are earning status, academic experience, age group, gender, working mode, education level, funding body, organisation type and position held in the organisation. Also the highly significant

predictors for impact of occupational hazard are earning status, academic experience and working mode of the respondents working in the education sector of West Bengal

6.3.5. ANALYSIS OF SOURCES OF OCCUPATIONAL HAZARDS:

Sources of occupational hazard consist of 13 variables described in the table 6.29.

Table 6.29 Items of Source of Occupational Hazard

Variable Name	Description
ohs1	Educational policy or Policy of the Institution
ohs2	Pursuing further education
ohs3	Disciplinary work
ohs4	Guidance work
ohs5	Campus violence
ohs6	Career instability
ohs7	Management Work Culture
ohs8	Work environment
ohs9	Family problem
ohs10	Organisational politics
ohs11	Students as source
ohs12	Guardians as source
ohs13	Outsiders as source

The variables are tested for multi – co linearity problem by applying Pearson correlation matrix. The Pearson correlation matrix is shown in the table 6.30.

Table 6.30 Correlation Matrix Among Sources Of Occupational Hazard

Pearson Correlation													
	ohs1	ohs2	ohs3	ohs4	ohs5	ohs6	ohs7	ohs8	ohs9	ohs10	ohs11	ohs12	ohs13
ohs1	1	.374**	.282**	.216**	.161*	0	.176*	.256**	.181*	.152*	.176*	0	.192*
ohs2	.374**	1	.706**	.449**	.161*	.227**	.167*	.389**	.315**	.209**	.189*	.338**	.231**
ohs3	.282**	.706**	1	.784**	0	.310**	.272**	.497**	.356**	.288**	.373**	.172*	.287**
ohs4	.216**	.449**	.784**	1	-.041	.387**	.241**	.597**	.242**	.177*	.403**	0	.291**
ohs5	.161*	.161*	0	-.041	1	.237**	.348**	0	.211**	.426**	.280**	.490**	.376**
ohs6	0	.227**	.310**	.387**	.237**	1	.197**	.372**	.446**	.515**	.434**	.416**	.546**
ohs7	.176*	.167*	.272**	.241**	.348**	.197**	1	.469**	0	.559**	0	.261**	.299**
ohs8	.256**	.389**	.497**	.597**	0	.372**	.469**	1	.156*	.376**	.463**	.231**	.277**
ohs9	.181*	.315**	.356**	.242**	.211**	.446**	0	.156*	1	.375**	.433**	.323**	.466**
ohs10	.152*	.209**	.288**	.177*	.426**	.515**	.559**	.376**	.375**	1	.362**	.604**	.575**
ohs11	.176*	.189*	.373**	.403**	.280**	.434**	0	.463**	.433**	.362**	1	.380**	.444**
ohs12	0	.338**	.172*	0	.490**	.416**	.261**	.231**	.323**	.604**	.380**	1	.619**
ohs13	.192*	.231**	.287**	.291**	.376**	.546**	.299**	.277**	.466**	.575**	.444**	.619**	1
**. Correlation is significant at the 0.01 level (2-tailed).													
*. Correlation is significant at the 0.05 level (2-tailed).													

From the Table 6.60, it is quite evident that the correlations are quite significant at the 0.01 level. This shows that the variables have a very high inter-correlations or inter-associations among themselves. This is a clear state of multicollinearity. It is therefore a type of disturbance in the data and if present in the data the statistical inferences made about the data may not be reliable. To remove the disturbances in the data Exploratory Factor Analysis was performed on the 13 variables through IBM SPSS Statistics 20.

Table 6.31 KMO and Bartlett's Test for Data Reduction of Items of Soh

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.728
Bartlett's Test of Sphericity	Approx. Chi-Square	1130.308
	Df	357
	Sig.	.000

The Kaiser-Meyer-Olkin measure of sampling adequacy test result obtained was 0.728, as given in Table 6.31. As the value is more than 0.6, it indicates that the sample is reasonably adequate and the data supports application of factor analysis. And the Bartlett's Test of sphericity shows it is very much significant since the value is 0.000.

The rotated component matrix obtained is shown in the Table 6.32.

Table 6.32 Rotated Component Matrixes of Items of Soha

	Component			
	1	2	3	4
ohs1	-.005	.093	.148	.776
ohs2	.205	.390	.050	.727
ohs3	.247	.735	-.005	.466
ohs4	.222	.866	-.056	.185
ohs5	.314	-.238	.639	.249
ohs6	.692	.342	.213	-.140
ohs7	-.141	.375	.826	.038
ohs8	.124	.765	.345	.086
ohs9	.761	.063	-.067	.271
ohs10	.466	.172	.707	.012
ohs11	.665	.342	.067	.034
ohs12	.604	-.080	.534	.142
ohs13	.697	.109	.411	.091

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 25 iterations.

The Table 6.32 is a rotated component matrix which clearly shows that 4 factors were extracted from 13 variables. These four factors are shown in the Table 6.33.

Table 6.33 Extracted Factors of Source of Occupational Hazard

Factor No	Name	Variable
1	Entity Interface	6.Career instability 9.Family problem 11.Students as source 12.Gaurdains as source 13.Outsiders as source
2	Work Structure	3. Disciplinary work 4. Guidance work 8.Work environment
3	Campus Work Environment	5.Campus violence 7. Management issues 10.Organisational politics
4	Policies (Organisation/Government)	1.Educational policy or Policy of the Institution 2. Pursuing further education

6.3.6. ANALYSIS OF STAKEHOLDER CONCEPT:

Stakeholder concept consists of 24 variables which are tested for correlation or association properties. The 24 variables are described in the table 6.34.

Table 6.34 Items of Stakeholder Concepts

Variable Name	Description
Stk1	In your organisation, for administrative issues, You know whom to approach for, so that you will not have to run around for resolution of the problem.
Stk2	In your organisation, processes for dealing with different administrative issues are well laid out and known to all employees.
Stk3	In your organisation, processes for dealing with different administrative issues are known to you personally.
Stk4	In your organisation, for obtaining resources for teaching or academic related activities. You know whom to approach.
Stk5	In your organisation, processes Obtaining resources for teaching or academic related activities, are well laid out and known to all employees
Stk6	In your organisation, processes for obtaining resources for teaching or academic related activities, are known to you personally.
Stk7	In your organisation, for dealing with Student indiscipline you know whom to approach.
Stk8	In your organisation, for dealing with Student indiscipline a proper system is well laid out and known to all employees
Stk9	In your organisation, processes for dealing with Student indiscipline are known to you personally.
Stk10	In your organisation, for handling parents' queries, you know whom to approach.
Stk11	In your organisation, processes for handling parents queries are well laid out and known to all employees
Stk12	In your organisation, processes for handling parents' queries are known to you personally.
Stk13	In your organisation, for handling outside interferences, you know whom to approach.
Stk14	In your organisation, processes for handling outside interferences are well laid out and known to all employees.
Stk15	In your organisation, processes for handling outside interferences are known to you personally.
Stk16	In your organisation, for handling students groups/ unions, you know whom to approach.
stk17	In your organisation, for handling different students groups/ unions strategies are well laid out and known to all employees.
Stk18	In your organisation, for handling different students groups/ unions strategies are known to you personally.
Stk19	There are certain unstated rules and expectations which dealing with different offices/ officials.
Stk20	Policies and rules are followed consistently.
Stk21	There is lot of unnecessary formality in working with the offices/ officials/ departments.
Stk22	There is power hierarchy maintained during working with the officials and during interactions.
Stk23	Officers/ departments communicate their requirements in clear and unambiguous terms.
Stk24	It requires multiple follow-ups to get the work done.

The variables are tested for multi – co linearity problem by applying Pearson correlation matrix. The Pearson correlation matrix is shown in the table 6.35.

Table 6.35 Correlations among Items of Stakeholder Concept

	stk1	stk2	stk3	stk4	stk5	stk6	stk7	stk8	stk9	stk10	stk11	stk12	stk13	stk14	stk15	stk16	stk17	stk18	stk19	stk20	stk 21	stk22	stk23	stk24
stk1	1	.679**	.627**	.738**	.505**	.405**	.585**	.671**	.465**	.732**	.618**	0	.663**	.662**	.495**	.661**	.442**	0	.538*	.335*	0	.452*	0	0
stk2	.679**	1	.659**	.510**	.633**	0	.449**	.475**	0	.599**	.546**	0	.466**	.460**	0	.493**	.364**	0	.255	.457*	0	.483*	0	0
stk3	.627**	.659**	1	.517**	.652**	0	.328**	.521**	.297*	.389**	.459**	0	.388**	.445**	.325**	.350**	.332**	0	.310*	.260*	.302*	.447*	0	0
stk4	.738**	.510**	.517**	1	.623**	.583**	.712**	.679**	.522**	.630**	.734**	.288*	.718**	.560**	.576**	.568**	.528**	0	.711*	.296*	.284*	.460*	0	0
stk5	.505**	.633**	.652**	.623**	1	.276*	.532**	.468**	.376**	.525**	.625**	.265*	.477**	.464**	.504**	.434**	.553**	0	.493*	.282*	.362**	.591*	.245*	0
stk6	.405**	0	0	.583**	.276*	1	.510**	.596**	.441**	.330**	.539**	0	.405**	.339**	.440**	.381**	.457**	0	.479*	0	0	0	0	0
stk7	.585**	.449**	.328**	.712**	.532**	.510**	1	.651**	.515**	.682**	.727**	0	.658**	.527**	.559**	.652**	.561**	0	.632*	.392*	.274*	.468*	0	0
stk8	.671**	.475**	.521**	.679**	.468**	.596**	.651**	1	.550**	.606**	.684**	0	.528**	.616**	.584**	.652**	.649**	.278*	.609*	.441*	0	.494*	.252*	0
stk9	.465**	0	.297*	.522**	.376**	.441**	.515**	.550**	1	.580**	.598**	0	.594**	.409**	.647**	.482**	.678**	0	.686*	0	.329**	.319*	0	0
stk10	.732**	.599**	.389**	.630**	.525**	.330**	.682**	.606**	.580**	1	.698**	.338*	.735**	.657**	.486**	.756**	.552**	0	.590*	.437*	0	.490*	0	0
stk11	.618**	.546**	.459**	.734**	.625**	.539**	.727**	.684**	.598**	.698**	1	.252*	.702**	.659**	.598**	.672**	.697**	0	.561*	.427*	0	.441*	0	0
stk12	0	0	0	.288*	.265*	0	0	0	0	.338**	.252*	1	.235*	.235*	0	.251*	.237*	0	0	0	0	0	0	0
stk13	.663**	.466**	.388**	.718**	.477**	.405**	.658**	.528**	.594**	.735**	.702**	.235*	1	.755**	.693**	.693**	.569**	0	.570*	.316*	.260*	.393*	0	0
stk14	.662**	.460**	.445**	.560**	.464**	.339**	.527**	.616**	.409**	.657**	.659**	.235*	.755**	1	.716**	.761**	.532**	.306*	.440*	.303*	0	.444*	0	0
stk15	.495**	0	.325**	.576**	.504**	.440**	.559**	.584**	.647**	.486**	.598**	0	.693**	.716**	1	.695**	.759**	.301*	.639*	0	.373**	.476*	.368*	0
stk16	.661**	.493**	.350**	.568**	.434**	.381**	.652**	.652**	.482**	.756**	.672**	.251*	.693**	.761**	.695**	1	.716**	.245*	.596*	.505*	0	.644*	0	.317*
stk17	.442**	.364**	.332**	.528**	.553**	.457**	.561**	.649**	.678**	.552**	.697**	.237*	.569**	.532**	.759**	.716**	1	0	.682*	.402*	.270*	.561*	.363*	0
stk18	0	0	0	0	0	0	0	.278*	0	0	0	0	0	.306*	.301*	.245*	0	1	0	0	.540**	.276*	.252*	.320*
stk19	.538**	.255*	.310**	.711**	.493**	.479**	.632**	.609**	.686**	.590**	.561**	0	.570**	.440**	.639**	.596**	.682**	0	1	.284*	.340**	.573*	.255*	0
stk20	.335**	.457**	.260*	.296*	.282*	0	.392**	.441**	0	.437**	.427**	0	.316**	.303*	0	.505**	.402**	0	.284*	1	0	.473*	.239*	.441*
stk21	0	0	.302*	.284*	.362**	0	.274*	0	.329**	0	0	0	.260*	0	.373**	0	.270*	.540**	.340**	0	1	.258	.452*	.392*
stk22	.452**	.483**	.447**	.460**	.591**	0	.468**	.494**	.319**	.490**	.441**	0	.393**	.444**	.476**	.644**	.561**	.276*	.573*	.473*	.258*	1	.319*	.347*
stk23	0	0	0	0	.245*	0	0	.252*	0	0	0	0	0	0	.368**	0	.363**	.252*	.255*	.239*	.452**	.319*	**1**	.446*
stk24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.317**	0	.320**	0	.441*	.392**	.347*	.446*	1

****. Correlation is significant at the 0.01 level (2-tailed).**

***. Correlation is significant at the 0.05 level (2-tailed).**

From the Table 6.35, it is quite evident that the correlations are quite significant at the 0.01 level. This shows that the variables have a very high inter-correlations or inter-associations among themselves. It is therefore a type of disturbance in the data and if present in the data the statistical inferences made about the data may not be reliable. To remove the disturbances in the data Exploratory Factor Analysis was performed on the 24 variables through IBM SPSS Statistics 20.

The Kaiser-Meyer-Olkin Measure of sampling adequacy test result obtained was 0.845, as given in Table 6.36. As the value is more than 0.6, it indicates that the sample is reasonably adequate and the data supports application of factor analysis.

Table 6.36 KMO And Bartlett's Test for Data Reduction of Items of Stakeholder Concept

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	1339.130
	Df	357
	Sig.	.000

The rotated component matrix obtained is shown in the Table 6.37.

Table 6.37 Rotated Component Matrixes for Items of Stakeholder Concepts

	Component					
	1	2	3	4	5	6
stk9	**.791**	.084	-.196	.228	.080	.051
stk15	**.782**	.031	-.002	.294	.275	.256
stk19	**.781**	.163	.049	.302	-.166	.045
stk13	**.774**	.238	.078	-.041	.225	.199
stk7	**.762**	.280	.217	.059	-.053	-.203
stk11	**.759**	.371	.211	.035	-.037	.066
stk17	**.742**	.087	.253	.318	.001	.206
stk4	**.734**	.491	.011	.110	-.127	.017
stk16	**.727**	.141	.493	-.059	.194	.236
stk8	**.712**	.348	.240	.053	.100	-.086
stk10	**.695**	.354	.278	-.196	.095	.227
stk6	**.672**	.095	.002	.111	-.005	-.369
stk14	**.661**	.231	.207	-.155	.434	.278
stk1	**.592**	.582	.154	-.131	.191	.061
stk3	.217	**.865**	.008	.085	.149	.080
stk2	.222	**.806**	.320	-.103	.082	.093
stk5	.380	**.681**	.096	.353	-.080	.206
stk20	.225	.229	**.811**	.032	.007	-.095
stk24	-.107	.002	**.693**	.391	.293	.136
stk22	.382	.355	**.495**	.305	-.002	.157
stk23	.187	-.088	.294	**.742**	.058	.000
stk21	.145	.254	-.028	**.713**	.430	-.097
stk18	.077	.103	.158	.275	**.824**	-.125
stk12	.129	.206	.037	.001	-.090	**.789**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

The Table 6.37 is a rotated component matrix which clearly shows that 6 factors were extracted from 24 variables. These six factors are shown in the Table 6.38.

Table 6.38 Factors Extracted From Items of Stakeholder Concept

Factor No	Name	Variable
1	Transparency in Organisation	**Stk9.** In your organisation, processes for dealing with Student indiscipline are known to you personally. **Stk15.** In your organisation, processes for Handling outside interferences are known to you personally. **Stk19.** There are certain unstated rules and expectations which dealing with different offices/ officials. **Stk13.** In your organisation, for Handling outside interferences, you know whom to approach. **Stk7.** In your organisation, for dealing with Student indiscipline you know whom to approach. **Stk11.** In your organisation, processes for Handling parents queries are well laid out and known to all employees **Stk17.** n your organisation, for Handling different students groups/ unions strategies are well laid out and known to all employees **Stk4.** In your organisation, for obtaining resources for teaching or academic related activities. You know whom to approach. **Stk16.** In your organisation, for Handling students groups/ unions, you know whom to approach? **Stk8.** In your organisation, for dealing with Student indiscipline a proper system is well laid out and known to all employees **Stk10.** In your organisation, for handling parents' queries, you know whom to approach. **Stk6.** In your organisation, processes for obtaining resources for teaching or academic related activities. Are known to you personally. **Stk14.** In your organisation, processes for Handling outside interferences are well laid out and known to all employees **Stk1.** In your organisation, for administrative issues, you know whom to approach for, so that you will not have to run around for resolution of the problem.
2	Stakeholder Administrative issues	**Stk3.** In your organisation, processes for dealing with different administrative issues are known to you personally. **Stk2.** In your organisation, processes for dealing with different administrative issues are well laid out and known to all employees **Stk5.** In your organisation, processes Obtaining resources for teaching or academic related activities. Are well laid out and known to all employees
3	Stakeholder Interface	**Stk20.** Policies and rules are followed consistently **Stk24.** It requires multiple follow-ups to get the work done. **Stk22.** There is power hierarchy maintained during working with the officials and during interactions.
4	Stakeholder policies	**Stk23.** Officers/ departments communicate their requirements in clear and unambiguous terms. **Stk21.** There is lot of unnecessary formality in working with the offices/ officials/ departments.
5	Student Control	**Stk18.** In your organisation, for Handling different students groups/ unions strategies are known to you personally.
6	Parent Control	**Stk12.** In your organisation, processes for handling parents' queries are known to you personally.

6.3.6. ANALYSIS OF TASK CONCEPT:

Task concept consists of 7 variables which are tested for correlation or association properties. The 7 variables are described in the table 6.39.

Table 6.39 Items of Task Related Concept

Variable Name	Description
Tsk1	I suffer from Job overload.
Tsk2	I have sufficient Job security
Tsk3	I have sufficient control of how to do my work.
Tsk4	I like the requirements and characteristics of my job.
Tsk5	There are sufficient resources for doing my job satisfactorily.
Tsk6	I know what the management expects out of me regarding my work.
Tsk7	There are conflicts between different parts of my work. Say teaching and evaluation etc.

The variables are tested for multi – co linearity problem by applying Pearson correlation matrix. The Pearson Correlation matrix is shown in the table 6.40

Table 6.40 Correlations Matrix among Items of Task Related Concepts

Correlations matrix among items of task related concepts							
	tsk1	**tsk2**	**tsk3**	**tsk4**	**tsk5**	**tsk6**	**tsk7**
tsk1	1	0	0	0	**-.338****	0	0
tsk2	0	1	0	**.347****	0	**.363****	0
tsk3	0	0	1	.271*	0	**.380****	0
tsk4	0	**.347****	.271*	1	.257*	**.505****	-.240*
tsk5	**-.338****	0	0	.257*	1	**.336****	0
tsk6	0	**.363****	**.380****	**.505****	**.336****	1	0
tsk7	0	0	0	-.240*	0	0	1
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

From the Table 6.40, it is quite evident that the correlations are quite significant at the 0.01 level. This shows that the variables have a very high inter-correlations or inter-associations among themselves. It is therefore a type of disturbance in the data and if present in the data the statistical inferences made about the data may not be reliable. To remove the disturbances in the data Exploratory Factor Analysis was performed on the 7 variables through IBM SPSS Statistics 20.

The Kaiser-Meyer-Olkin Measure of sampling adequacy test result obtained was 0.624, as given in Table 6.41. As the value is more than 0.6, it indicates that the sample is reasonably adequate and the data supports application of factor analysis.

Table 6.41 KMO And Bartlett's Test for Data Reduction of Items of Task Related Concepts

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.624
Bartlett's Test of Sphericity	Approx. Chi-Square	72.601
	Df	21
	Sig.	.000

The rotated component matrix obtained is shown in the Table 6.41.

Table 6.42 Rotated Component Matrix for Items of Task Related Concepts

	Component		
	1	2	3
`tsk6	.812	.099	-.103
tsk4	.746	.030	-.298
tsk2	.710	.006	.265
tsk3	.450	.230	-.365
tsk1	.105	-.899	.120
tsk5	.376	.683	.207
tsk7	-.049	.060	.890

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

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The Table 6.42 is a rotated component matrix which clearly shows that 3 factors were extracted from 7 variables. These three factors are shown in the Table 6.43.

Table 6.43 Extracted Factors of Task Related Concepts

Factor No	Name	Variable
1	Task Control	**Tsk6**. I know what the management expects out of me regarding my work. **Tsk4.** I like the requirements and characteristics of my job. **Tsk2.** I have sufficient Job security **Tsk3.** I have sufficient control of how to do my work.
2	Task Density	**Tsk1.** I suffer from Job overload. **Tsk5.** There are sufficient resources for doing my job satisfactorily.
3	Task Conflict	**Tsk7.** There are conflicts between different parts of my work. Say teaching and evaluation etc.

6.3.6. ANALYSING THE RELATION OF IMPACT OF OCCUPATIONAL HAZARD WITH THE CONCEPTS SOURCE OF OCCUPATIONAL HAZARD, STAKEHOLDER CONCEPT AND TASK CONCEPT:

Based on the theoretical concept we tried to analyse the factors of sources of occupational hazard, stakeholder concept and task concept for predicting the impact of occupational hazard.

We try to assume that there is a linear relation among the Impact of occupational hazard and the factors of sources of occupational hazard, stakeholder concept and task concept.

6.3.6.1. NULL HYPOTHESIS - H_{013}:

Null Hypothesis - H_{013}: There is no linear relation existing among the variables Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10, Z11, Z12 and Z13.

Where in the linear equation for impact of occupational hazard

$$\mathbf{Y_2 = C + P1Z1 + P2Z2 + P3Z3 + P4Z4 + P5Z5 + P6Z6 + P7Z7 + P8Z8 + P9Z9 + P10Z10 + P11Z11.}$$

Which means H_{013}: $P1 = P2 = P3 = P4 = P5 = P6 = P7 = P8 = P9 = P10 = P11 = 0$

The data is tested with linear regression analysis through IBM SPSS 20. The model summary obtained is shown in table 6.44.

Table 6.44 Ioh Model 2 Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.342[a]	.117	.065	1.20824	2.417

a. Predictors: (Constant), Pol, Task_Control, Task_Conflict, EntInt, Stake_Policy, Task_Density, CamCul, WrkStru, Stake_Admin, Stake_Interface, Student_Control, Parent_Control, Transparency_Org

b. Dependent Variable: Impact_of_OH

The Table 6.45 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.117 which means the linear equation explains the 11.7 % of the variance in the data.

Table 6.45 Anova among Predictors of Ioh in Model 2

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.923	13	3.302	2.262	.008[b]
	Residual	324.084	222	1.460		
	Total	367.008	235			

a. Dependent Variable: Impact_of_OH

b. Predictors: (Constant), Pol, Task_Control, Task_Conflict, EntInt, Stake_Policy, Task_Density, CamCul, WrkStru, Stake_Admin, Stake_Interface, Student_Control, Parent_Control, Transparency_Org

The ANOVA table 6.45 gives the significant value of 0.008. Since this is less than 0.05 the F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.46 Coefficients of Sources of Ioh In Ioh Model 2a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.446	.668		3.663	.000
	Task_Conflict	.098	.045	.154	2.164	.032
	Task_Density	.079	.086	.064	.912	.363
	Task_Control	-.121	.102	-.099	-1.188	.036
	Parent_Control	-.021	.089	-.031	-.237	.813
	Student_Control	.043	.088	.066	.488	.026
	Stake_Policy	-.015	.076	-.019	-.202	.840
	Stake_Interface	-.263	.093	-.282	-2.817	.005
	Stake_Admin	.001	.099	.001	.005	.996
	Transparency_Org	.126	.179	.138	.703	.083
	EntInt	-.009	.051	-.013	-.182	.856
	WrkStru	.040	.052	.060	.764	.446
	CamCul	.033	.049	.049	.676	.049
	Pol	.073	.065	.085	1.116	.266

a. Dependent Variable: Impact_of_OH

The Table 6.46 explains the Beta Value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Stakeholder Interface and Task Conflict are significant predictors of the Impact of occupational hazard. On the basis of the Sig. values it is quite evident that the Constant and the coefficients of the Task Conflict, Task Control, Student Control, Stakeholder Interface, Transparency in the Organisation and Campus Culture will never be 0.

Then the Linear equation for impact of occupational hazard

$Y_2 = 2.446 + 0.98$ Task_Conflict $- 0.121$ Task_Control $+ 0.043$ Student_Control $- 0.263$ Stake_Interface $+ 0.033$ CamCul

The coefficients of the other variables can be zero and hence not used in the equation.

6.3.7. ANALYSIS OF FACTORS INFLUENCING THE COPING STRATEGIES:

The nine coping strategies that were utilized for this research are given in the table 6.47 along with their Factors used to evaluate in a 7 point Likert scale.

Table 6.47 Items Corresponding the Coping Strategies

Coping Strategy (Mean) (SD)	Factors for Evaluation
1.Problem Solving Mean = 4.8 SD = 1.1	1. I just concentrated on what I had to do next. The next step 2. I changed something so that things would turn out alright 3. I stood my ground and fought for what I wanted. 4. I made plan of action and followed it. 5. I tackled the problem head on. 6. I knew what had to be done, so I doubled my efforts and tried harder to make things work. 7. It was a tricky problem, so I had to work around the edges to make things come out ok. 8. I worked on solving the problems in the situation. 9. I struggled to resolve the problem.
2.Cognitive Restructuring Mean = 4.7 SD = 1.1	1. I tried to get a new angle on the situation 2. I looked for the silver lining, so to speak, tried to look at the bright side of things 3. I told myself things that helped me feel better. 4. I looked at things in different light and tried to make the best of what was available 5. I asked myself what was really important, and discovered that things after all were not so bad. 6. I knew what had to be done, so I doubled my efforts and tried harder to make things work. 7. I stepped back into the situation and put things into perspective. 8. I reorganized the way I looked at the situation, so things didn't look so bad. 9. I went over the problem again and again in my mind and finally saw things in a different light.
3.Express Emotion Mean = 4.3 SD = 1.1	1. I found ways to blow off steam 2. I did some things to get it out of my system. 3. I let my emotions go. 4. I let out my feelings to reduce the stress 5. I let my feelings out somehow. 6. My feelings were overwhelming and they just exploded. 7. I got in touch my feelings and then let them go. 8. I was angry and really blew up.
4.Social Support Mean = 4.4 SD = 1.0	1. I accepted sympathy and understanding from someone 2. I found somebody who was a good listener 3. I talked to someone about how I was feeling. 4. I just spent more time with people I liked. 5. I talked to someone that I was very close to. 6. I let my friends help out. 7. I asked a friend or relative I respect for advice. 8. I talked to someone who was in similar situation.
5.Problem Avoidance Mean = 4.0 SD = 1.0	1. I slept more than usual 2. I went along as if nothing were happening 3. I tried to forget the whole thing. 4. I didn't let it get to me;I refused to think about it too much. 5. I decided that it was really someone else problem and not mine. 6. I avoided the person who was causing the trouble.

	7. I made light of the situation and refused to get too serious about it. 8. Every time I thought about it I got upset,; so I just stopped thinking about it.
6.Wishful Thinking Mean = 4.1 SD = 1.3	1. I hope the problem would take care of itself 2. I hoped a miracle would happen 3. I wished that I never let myself get involved with that situation. 4. I wished that the situation would go away, or somehow be over with. 5. I wished that the situation had never started. 6. I had fantasies or wishes about how things might turn out.. 7. I asked a friend or relative I respect for advice. 8. I wished I could have changed what happened. 9. I thought about fantastic and unreal things that made me feel better.
7.Self Criticism Mean = 3.8 SD = 1.2	1. I told myself that , if I wasn't so careless things like this wouldn't happen 2. I realized that I brought the problem on myself 3. I criticized myself for what happened. 4. I realized that I was personally responsible for my difficulties and really lectured myself. 5. I kicked myself for letting things happen. 6. It was my mistake and I needed to suffer my consequences. 7. I told myself how stupid I was.
8.Social Withdrawal Mean = 4.1 SD = 1.0	1. I tried to keep my feelings to myself 2. I spent more time alone. 3. I avoided my family and friends 4. I didn't talk to other people about the problem. 5. I kept my thoughts and feelings to myself. 6. I did not let others know how I was feeling.
9.Political Mean = 4.0 SD = 1.0	1. I keep in touch with influential people outside my organisation. 2. I used externally influential person to help me. 3. I managed to get more resources to cope with the problem. 4. I approached the senior influential colleagues to help me 5. I got help from the colleagues during the problem 6. I approached influential persons in the organisation to help me

The mean of the coping strategies which were measured in the scale of 1 to 7 shows greater than 3.5 for all the coping strategies. This means that respondents actually adopt the combination of coping strategies when faced with hazards to relive themselves from such stressful situations.

All these coping strategies were analysed with the variables like Gender, Age group, Educational Level, Earning Status, Working Mode, Organisation Types, and Position held in the Organisation, and Personality Traits of the Respondents working in the Education Sector of West Bengal. Individual hypothesis is formulated for exact of these variables and test for the evaluation of either being able to accept or fail to accept the null hypothesis.

6.3.6.1. Null Hypothesis - H_{014}:

Null Hypothesis - H_{014}: There is no linear relation between the Coping Strategies-Problem Solving and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.48 Model Summary of Problem Solving

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.402[a]	.162	.134	1.93977

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.48 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.162 which means the linear equation explains the 16.2 % of the variance in the data.

Table 6.49 Anova of Factors Influencing Problem Solving

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	242.655	11	22.060	5.863	.000[b]
	Residual	1256.747	334	3.763		
	Total	1499.402	345			

a. Dependent Variable: Problem_Solving

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.49 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.50 Coefficients of Factors Influencing Problem Solving

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.247	.820		7.621	.000
	Gender	-.136	.255	-.033	-.534	.594
	Age_Group	.520	.157	.256	3.317	.001
	Marital_st	-.494	.287	-.088	-1.720	.086
	Edu_Level	-.665	.160	-.299	-4.157	.000
	Ern_Status	.236	.233	.056	1.009	.314
	Acad_Exp	-.288	.165	-.123	-1.743	.082
	Work_Mod	.139	.171	.044	.813	.417
	Org_Type	.116	.152	.054	.760	.448
	Fund_Bdy	-.666	.169	-.219	-3.936	.000
	Position_hld	.276	.102	.159	2.701	.007
	Personality	-.114	.029	-.205	-3.968	.000

a. Dependent Variable: Problem_Solving

The Table 6.50 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Age Group are the significant predictors for the Coping Strategy of Problem Solving. Also

from the table we can also infer that the coefficients of the Constant and the variables Age group, Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.2. NULL HYPOTHESIS - H_{015}:

Null Hypothesis - H_{015}: There is no linear relation between the Coping Strategies-Cognitive Restructuring and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.51 Model Summary of Cognitive Restructiong

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376[a]	.141	.113	1.94677

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.51 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.141 which means the linear equation explains the 14.1 % of the variance in the data.

Table 6.52 Anova of Factors Influencing Cognitive Restructuring

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	208.099	11	18.918	4.992	.000[b]
	Residual	1265.837	334	3.790		
	Total	1473.936	345			

a. Dependent Variable: Cognitive_Restructuring

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.52 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.53 Coefficients of Factors Influencing Cognitive Restructuring

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.898	.823		7.169	.000
	Gender	-.061	.255	-.015	-.240	.811
	Age_Group	.422	.157	.209	2.679	.008
	Marital_st	-.352	.289	-.063	-1.220	.223
	Edu_Level	-.642	.161	-.291	-4.001	.000
	Ern_Status	.170	.234	.041	.724	.470
	Acad_Exp	-.254	.166	-.109	-1.532	.127
	Work_Mod	.280	.172	.089	1.634	.103
	Org_Type	.135	.153	.064	.884	.377
	Fund_Bdy	-.664	.170	-.221	-3.910	.000
	Position_hld	.250	.102	.145	2.440	.015
	Personality	-.086	.029	-.157	-2.995	.003

a. Dependent Variable: Cognitive_Restructuring

The Table 6.53 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Funding Body are the significant predictors for the Coping Strategy of Cognitive

Restructuring. Also from the table we can also infer that the coefficients of the Constant and the variables age group, Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.3. NULL HYPOTHESIS - H_{016}:

Null Hypothesis - H_{016}: There is no linear relation between the Coping Strategies-Express Emotion and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.54 Model Summary of Express Emotion

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426[a]	.181	.154	1.76371

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.54 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.181 which means the linear equation explains the 18.1 % of the variance in the data.

Table 6.55 Anova of Factors Influencing Express Emotion

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.874	11	20.898	6.718	.000[b]
	Residual	1038.959	334	3.111		
	Total	1268.834	345			

a. Dependent Variable: Express_Emotion

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.55 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.56 Coefficients of Factors Influencing Express Emotion

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.452	.745		7.315	.000
	Gender	-.337	.231	-.088	-1.456	.146
	Age_Group	.303	.143	.162	2.129	.034
	Marital_st	-.349	.261	-.068	-1.335	.183
	Edu_Level	-.783	.145	-.382	-5.383	.000
	Ern_Status	.124	.212	.032	.586	.558
	Acad_Exp	-.161	.150	-.075	-1.072	.285
	Work_Mod	.154	.156	.053	.993	.321
	Org_Type	.201	.139	.103	1.453	.147
	Fund_Bdy	-.553	.154	-.198	-3.596	.000
	Position_hld	.373	.093	.233	4.017	.000
	Personality	-.101	.026	-.197	-3.844	.000

a. Dependent Variable: Express_Emotion

The Table 6.56 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Position Held are

the significant predictors for the Coping Strategy of Express Emotion. Also from the table we can also infer that the coefficients of the Constant and the variables age group, Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.4. NULL HYPOTHESIS - H_{017}:

Null Hypothesis - H_{017}: There is no linear relation between the Coping Strategies-Social Support and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.57 Model Summary of Social Support

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.410[a]	.168	.141	1.80553

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.57 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.168 which means the linear equation explains the 16.8 % of the variance in the data.

Table 6.58 Anova of Factors Influencing Social Support

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	220.416	11	20.038	6.147	.000[b]
	Residual	1088.815	334	3.260		
	Total	1309.230	345			

a. Dependent Variable: Social_Support

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.58 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.59 Coefficients of Factors Influencing Social Support

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.096	.763		6.678	.000
	Gender	-.213	.237	-.055	-.897	.370
	Age_Group	.264	.146	.139	1.810	.071
	Marital_st	-.297	.268	-.057	-1.111	.267
	Edu_Level	-.735	.149	-.353	-4.940	.000
	Ern_Status	.195	.217	.050	.899	.369
	Acad_Exp	-.070	.154	-.032	-.456	.649
	Work_Mod	.260	.159	.087	1.631	.104
	Org_Type	.171	.142	.086	1.207	.228
	Fund_Bdy	-.561	.157	-.198	-3.562	.000
	Position_hld	.359	.095	.221	3.779	.000
	Personality	-.092	.027	-.176	-3.421	.001

a. Dependent Variable: Social_Support

The Table 6.59 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Position Held are

the significant predictors for the Coping Strategy of Express Emotion. Also from the table we can also infer that the coefficients of the Constant and the variables Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.5. NULL HYPOTHESIS - H_{018}:

Null Hypothesis - H_{018}: There is no linear relation between the Coping Strategies-Problem Avoidance and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.60 Model Summary of Problem Avoidance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.394[a]	.155	.128	1.67779

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.60 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.155 which means the linear equation explains the 15.5 % of the variance in the data.

Table 6.61 Anova of Factors Influencing Problem Avoidance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	172.928	11	15.721	5.585	.000[b]
	Residual	940.201	334	2.815		
	Total	1113.129	345			

a. Dependent Variable: Problem_Avoidance

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.61 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.62 Coefficients of Factors Influencing Problem Avoidance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.274	.709		7.437	.000
	Gender	-.004	.220	-.001	-.020	.984
	Age_Group	.393	.136	.224	2.895	.004
	Marital_st	-.249	.249	-.052	-.999	.318
	Edu_Level	-.700	.138	-.365	-5.057	.000
	Ern_Status	-.121	.202	-.034	-.599	.550
	Acad_Exp	-.256	.143	-.127	-1.790	.074
	Work_Mod	.083	.148	.030	.560	.576
	Org_Type	.110	.132	.060	.833	.405
	Fund_Bdy	-.637	.146	-.244	-4.358	.000
	Position_hld	.317	.088	.212	3.594	.000
	Personality	-.067	.025	-.141	-2.709	.007

a. Dependent Variable: Problem_Avoidance

The Table 6.62 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Funding Body

are the significant predictors for the Coping Strategy of Problem Avoidance. Also from the table we can also infer that the coefficients of the Constant and the variables Age group, Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.6. NULL HYPOTHESIS - H_{019}:

Null Hypothesis - H_{019}: There is no linear relation between the Coping Strategies-Wishful Thinking and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.63 Model Summary of Wishful Thinking

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408[a]	.167	.139	1.86116

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.63 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.167 which means the linear equation explains the 16.7 % of the variance in the data.

Table 6.64 Anova of Factors Influencing Wishful Thinking

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	231.458	11	21.042	6.075	.000[b]
	Residual	1156.944	334	3.464		
	Total	1388.402	345			

a. Dependent Variable: Wishful_Thinking

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.64 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.65 Coefficients of Factors Influencing Wishful Thinking

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.603	.787		7.124	.000
	Gender	-.156	.244	-.039	-.640	.523
	Age_Group	.148	.150	.076	.985	.325
	Marital_st	-.285	.276	-.053	-1.034	.302
	Edu_Level	-.869	.153	-.405	-5.661	.000
	Ern_Status	.080	.224	.020	.356	.722
	Acad_Exp	-.130	.158	-.058	-.820	.413
	Work_Mod	-.005	.164	-.002	-.030	.976
	Org_Type	.391	.146	.190	2.671	.008
	Fund_Bdy	-.811	.162	-.278	-4.999	.000
	Position_hld	.226	.098	.135	2.310	.022
	Personality	-.100	.028	-.186	-3.609	.000

a. Dependent Variable: Wishful_Thinking

The Table 6.65 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized

terms. Hence we can very well say that Education Level and Funding Body are the significant predictors for the Coping Strategy of Problem Avoidance. Also from the table we can also infer that the coefficients of the Constant and the variables Education Level, Organisation Type, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.7. NULL HYPOTHESIS - H_{020}:

Null Hypothesis - H_{019}: There is no linear relation between the Coping Strategies-Self Criticism and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.66 Model Summary Self Criticism

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.413[a]	.170	.143	1.71195

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.66 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.170 which means the linear equation explains the 17 % of the variance in the data.

Table 6.67 Anova of Factors Influencing Self Criticism

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	201.167	11	18.288	6.240	.000[b]
	Residual	978.874	334	2.931		
	Total	1180.041	345			

a. Dependent Variable: Self_Criticism

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.67 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.68 Coefficients of Factors Influencing Self Criticism

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.203	.723		8.574	.000
	Gender	-.667	.225	-.181	-2.970	.003
	Age_Group	.276	.138	.153	1.993	.047
	Marital_st	-.261	.254	-.053	-1.027	.305
	Edu_Level	-.645	.141	-.326	-4.567	.000
	Ern_Status	.061	.206	.016	.294	.769
	Acad_Exp	-.383	.146	-.184	-2.626	.009
	Work_Mod	.164	.151	.058	1.087	.278
	Org_Type	.047	.135	.025	.349	.728
	Fund_Bdy	-.549	.149	-.204	-3.681	.000
	Position_hld	.296	.090	.192	3.281	.001
	Personality	-.092	.025	-.186	-3.607	.000

a. Dependent Variable: Self_Criticism

The Table 6.68 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Funding Body

are the significant predictors for the Coping Strategy of Problem Avoidance. Also from the table we can also infer that the coefficients of the Constant and the variables Gender, Age Group, Education Level, Academic Experience, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.8. NULL HYPOTHESIS - H_{021}:

Null Hypothesis - H_{021}: There is no linear relation between the Coping Strategies-Social Withdrawal and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.69 Model Summary Social Withdrawal

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374[a]	.140	.111	1.76060

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.69 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.140 which means the linear equation explains the 14 % of the variance in the data.

Table 6.70 Anova Of Factors Influencing Social Withdrawal

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	168.163	11	15.288	4.932	.000[b]
	Residual	1035.298	334	3.100		
	Total	1203.461	345			

a. Dependent Variable: Social_Withdrawal

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.70 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.71 Coefficients of Factors Influencing Social Withdrawal

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.330	.744		7.163	.000
	Gender	-.316	.231	-.085	-1.369	.172
	Age_Group	.268	.142	.147	1.883	.061
	Marital_st	-.408	.261	-.082	-1.566	.118
	Edu_Level	-.544	.145	-.272	-3.744	.000
	Ern_Status	.008	.212	.002	.039	.969
	Acad_Exp	-.181	.150	-.086	-1.207	.228
	Work_Mod	.151	.155	.053	.971	.332
	Org_Type	.139	.138	.073	1.003	.317
	Fund_Bdy	-.641	.153	-.236	-4.174	.000
	Position_hld	.263	.093	.169	2.834	.005
	Personality	-.070	.026	-.141	-2.691	.007

a. Dependent Variable: Social_Withdrawal

The Table 6.71 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Funding Body

are the significant predictors for the Coping Strategy of Problem Avoidance. Also from the table we can also infer that the coefficients of the Constant and the variables Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.9. NULL HYPOTHESIS - H_{022}:

Null Hypothesis - H_{021}: There is no linear relation between the Coping Strategies-Political and the variables Gender, Age Group, Marital Status, Educational Level, Earning Status, Academic Experience, Working Mode, Organisation Type, Funding Body, Position Held in the Organisation and the Personality trait of the respondents adopting the strategy.

To test this hypothesis linear regression analysis is done on the dependent and independent variables. The results are explained with the tables obtained from the analysis.

Table 6.72 Model Summary of Political

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446[a]	.199	.145	1.66166

a. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The Table 6.72 explains us the multiple linear regression model summary and overall fit statistics. We find that R SQUARE of our model is 0.199 which means the linear equation explains the 19.9 % of the variance in the data.

Table 6.73 Anova of Factors Influencing Political

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	110.593	11	10.054	3.641	.000[b]
	Residual	444.540	161	2.761		
	Total	555.133	172			

a. Dependent Variable: Political

b. Predictors: (Constant), Personality, Acad_Exp, Position_hld, Work_Mod, Marital_st, Ern_Status, Fund_Bdy, Gender, Edu_Level, Org_Type, Age_Group

The ANOVA table 6.73 gives the significant value of 0.000. Hence F-test is highly significant. Hence we can assume that there is a linear relationship between the variables in our model.

Table 6.74 Coefficients of Factors Influencing Political

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.853	.993		4.887	.000
	Gender	-.227	.308	-.063	-.735	.464
	Age_Group	.181	.190	.104	.952	.342
	Marital_st	-.503	.348	-.104	-1.443	.151
	Edu_Level	-.721	.194	-.376	-3.719	.000
	Ern_Status	-.099	.283	-.027	-.349	.728
	Acad_Exp	-.048	.200	-.024	-.238	.812
	Work_Mod	.142	.207	.052	.686	.494
	Org_Type	.329	.185	.179	1.780	.077
	Fund_Bdy	-.648	.205	-.248	-3.161	.002
	Position_hld	.303	.124	.202	2.446	.016
	Personality	-.089	.035	-.185	-2.542	.012

a. Dependent Variable: Political

The Table 6.74 explains the Beta value for each variable. The Beta value expresses the relative importance of each independent variable in standardized terms. Hence we can very well say that Education Level and Funding Body

are the significant predictors for the Coping Strategy of Problem Avoidance. Also from the table we can also infer that the coefficients of the Constant and the variables Education Level, Funding Body, Position Held and Personality Type will never be 0.

6.3.6.10. SUMMARY OF HYPOTHESIS H_{014}, H_{015}, H_{016}, H_{017}, H_{018}, H_{019}, H_{020}, H_{021} AND H_{022}:

On the basis of the coefficient table for all the coping strategies a table 6.76 is made listing out the significant predictors for each of the coping strategies along with their coefficients.

Table 6.76 Summary of Coping Strategies and Their Predictors

Hypothesis	Coping Strategy	Coefficients	Significant Predictors	Beta Value	Sig.
H_{013}	.Problem Solving	.520	Age Group	.256	.001
		-.665	Education Level	-.299	.000
		-.666	Funding Body	-.219	.000
		.276	Position Held	.159	.007
		-.114	Personality Type	-.114	.000
H_{014}	Cognitive Restructuring	.422	Age Group	.209	.008
		-.642	Education Level	-.291	.000
		-.664	Funding Body	-.221	.000
		.250	Position Held	.145	.015
		-.086	Personality Type	-.157	.003
H_{015}	Express Emotion	.303	Age Group	.162	.034
		-.783	Education Level	-.382	.000
		-.553	Funding Body	-.198	.000
		.373	Position Held	.233	.000
		-.101	Personality Type	-.197	.000
H_{016}	Social Support	-.735	Education Level	-.353	.000
		-.561	Funding Body	-.198	.000
		.359	Position Held	.221	.000
		-.092	Personality Type	-.176	.001
H_{017}	Problem Avoidance	.393	Age Group	.224	.004
		-.700	Education Level	-.365	.000
		-.637	Funding Body	-.244	.000
		.317	Position Held	.212	.000
		-.067	Personality Type	-.141	.007
H_{018}	Wishful Thinking	-.869	Education Level	-.405	.000
		.391	Organisation Type	.190	.008
		-.811	Funding Body	-.278	.000
		.226	Position Held	.135	.022
		-.100	Personality Type	-.186	.000
H_{019}	Self Criticism	-.667	Gender	-.181	.003
		.276	Age Group	.153	.047
		-.645	Education Level	-.326	.000
		-.383	Academic Experience	-.184	.009
		-.549	Funding Body	-.204	.000
		.296	Position Held	.192	.001
		-.092	Personality Type	-.186	.000
H_{020}	Social Withdrawal	-.544	Education Level	-.272	.000
		-.641	Funding Body	-.236	.000
		.263	Position Held	.169	.005
		-.070	Personality Type	-.141	.007
H_{021}	Political	-.721	Education Level	-.376	.000
		-.648	Funding Body	-.248	.002
		.303	Position Held	.202	.016
		-.089	Personality Type	-.185	.012

The common variables for all the coping strategies are Education Level of the Respondents, The funding Body of the Organisation, Current position held by the respondents and the Personality Type of the respondents. The three variables Education Level of the respondents, the funding Body of the Organisation and the Personality Type of the respondents have negative coefficients.

Based on this summary it is quite evident that the four factors that is Education Level, Funding Body, Position held and Personality types have linear relationship in predicting the coping strategies adopted. Since these factors are categorical variables and the coping strategy is ordinal variable, Chi-Square analysis is done between these variables with the coping strategies to find out the degree of association between the variables with the coping strategies. Based on the results graphs are plotted to get the picture of their associations through plotting graphs on the Cramer's V, Gamma and the Somer's Symmetric value. The graphs are presented below.

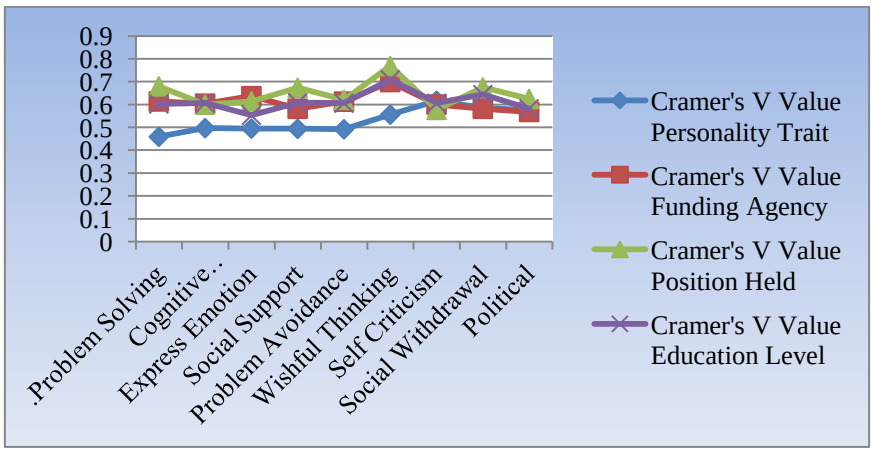

Figure 6.4.Cramer's V Value of Independent Variables along the Coping Strategies

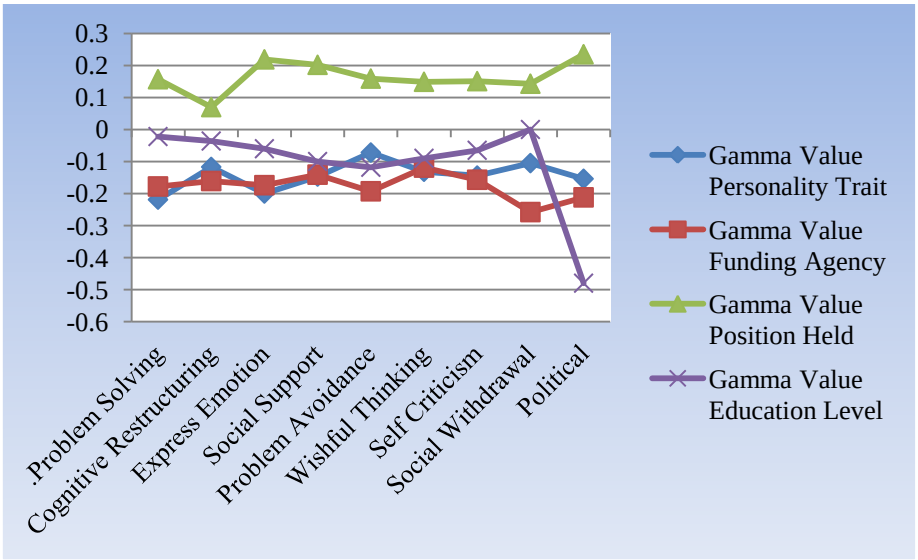

Figure 6.5.Gamma Value of Independent Variables along the Coping Strategies

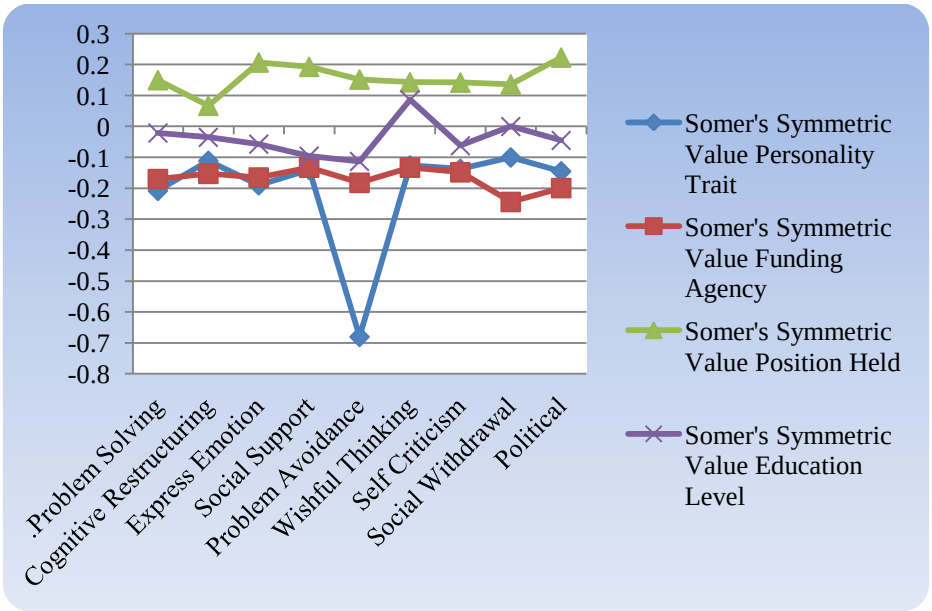

Figure 6.6.Somer's Symmetric Value of Independent Variables along the Coping Strategies

The Somer's D, Gamma and Cramer's V values indicate that the close association with the coping strategies are more with Position held and then with education level. This means that the coping strategies to that are adapted by the respondents are very much dependent on the position they are

occupying in the organisation along with their education level. The associations between the variables and the coping strategies are statistically significant.

6.4. CONCLUSION:

The detailed analysis shows the predictors of the three important concepts of this research i.e. Impact of Occupational Hazard, Sources of Occupational Hazard and the Coping strategies adopted by the respondents working in the education sector of West Bengal.

CHAPTER – 7

7. CONCLUSION AND RECOMMENDATION

7.1. FINDINGS:

The findings of this research are divided into qualitative data analysis findings and quantitative data analysis findings.

7.1.1. QUALITATIVE DATA ANALYSIS FINDINGS:

The first research question was about the existence to the hazard among the employees of the education sector. On the basis of the in-depth interview it is very clear that the employees working in the education sector of West Bengal are not free from the perils of dangers in the occupation. Though the maximum employees speak of the common hazard like occupational stress, still the other hazards are Burnout, Musculo-Skeletal Disorder, and False Accusation. It was also found that the musculo-skeletal disorder was found more in primary and secondary schools of West Bengal which are mostly run by the government of West Bengal. The reason for the musculo-skeletal disorder is due to very poor infrastructure and resources provided for teaching. Since the change of the political power in West Bengal the violence in college/university campus has increased to a considerable number.

(Chattopadhyay, Campus Violence In Educational Institution: An Experience (With Reference To West Bengal), 2013), There are number of occasions when teachers and principals are beaten to the extent that it led them to lose their life.

The second research question was to know what could be the factors of the hazards. The sources of these hazards as perceived by the employees working in the education sector are due to no proper organisational or governmental policies. The management culture or the work culture is also not very amicable and comfortable. These factors also aggravate the hazards. Another main source of the hazard is the job itself. Today the job descriptions of the employees who are working in the education sector are very much different from what it was earlier. The jobs are not just limited to academics like teaching, evaluating, assessing and managing the classes. They have to perform non-teaching jobs also like clerical jobs of recording the data and maintenance of data, they have to participate in the school/college reviews, they have to undergo continuous professional development like participating in seminars, writing articles for publications apart from their current educational qualification they have to go for continuous up gradation in their qualifications. They also have to satisfy their stakeholders like their authorities, management, students, guardians, approving bodies and government agencies. They have to handle administrative duties when they are in the positions of head of the institution, department heads and manage all resources like library, computer or science laboratories etc. They are even entrusted with the responsibility of maintaining student discipline, train and

mentor the students in different skills and sports. They also have to maintain a cordial relation with the guardians of the students and also accompany students in field visits and other trips. All these activities not only eat into their time but also keep them into high pressures both physically as well as mentally. This creates lots of stress in an individual. Moreover in West Bengal campus violence is quite a common phenomenon. The sources for the campus violence can be attributed to many reasons. Researchers have identified many determinants like student teacher relation, campus culture, policies of the organisation in terms of law enforcement and discipline, etc. The source for false accusations could be attributed to organisational politics, difficult teacher – parent relationships etc. Apart from the above mentioned sources the other sources are stakeholder related concepts and task related concepts. The stakeholder related concepts are stakeholder multiplicity, stakeholder complexity, and stakeholder interface and stakeholder administration. The task related concepts are task complexity, task ambiguity and task description.

To the question how these hazards have impacted the majority of the respondents answered that they had to take the help of medication due to the stress that incurred in their jobs. Many respondents also complained of sleeplessness, boredom and also losing interest in their jobs. Few respondents also complained of the damage that occurred in the relationship with their colleagues. Few respondents also pointed out on not being able to balance between their work life and their home life.

The next research question was to how to cope with these hazards. To this the respondents had a view of adopting multiple coping strategies based on the

phases of the hazards. According to the respondents in the initial phase of the hazard they normally adopted emotion focused strategy or avoidance strategies. Some respondents even tried the self-criticism strategies. Few of them tried to adopt humour strategies to decrease the intensity of the hazard. But as the intensity of the hazard starts increasing some respondents tend to lose their patience. This made them adopt the confronting strategies. In spite of adopting these strategies if the hazard gets aggravated respondents complained of lot of health related problems like losing appetite, sleeplessness, nightmares, headaches and fatigues. In this phase of the hazard most respondents spoke of social support as the common coping mechanism adopted by them. They even tried to adopt problem focused strategy like seeking support of their higher authorities, management, supervisors and colleagues. When the impact of the hazard was extensive and respondents felt totally helpless and unable to cope with the hazard they tried to adopt the withdrawal strategy or attacking strategy. The withdrawal strategy was in the form of taking more of sick leaves, avoiding few tasks, coming late to workplace or intentionally leaving early. When none of the strategies worked then the respondents aimed to end the hazard by quitting like resigning, requesting for transfer to different location, department or branch.

The final research question was to analyse the factors that influence the employees to adopt a coping strategy. To this all the respondents answered that their personality and their experience helped them to adopt any particular strategy.

Based on the findings from qualitative analysis we can form the following theories:

1. Stake holder related concepts, task related concepts, organisational policies, organisational culture, management issues, job related variables like job profile, job security etc,, relationship with parents, student handling and control process all contribute to escalate the occupational hazards among the employees of the education sector of West Bengal.
2. The hazards impact the employees both physically and mentally. Physically by causing damage to their health and body and mentally by making them to loose interest in their jobs, causing boredom and fatigue impacting their performance and quality of work life.
3. To cope with these hazards the employees adopt various strategies like emotion focused, problem focused, self criticism, social withdrawal , seeking support and if they can't cope then they exit either by resigning or re-locating themselves from the place of hazard.
4. To adopt any coping mechanism the employee's personality trait and their experience in their jobs influences a lot.

7.1.2. QUANTITATIVE DATA ANALYSIS FINDINGS:

The theories formed from the findings of the qualitative phase are tested through the help of a questionnaire and collecting primary data with his

questionnaire. Initially the impact of occupational hazard was analysed with the demographic variables like gender, age group, marital status, educational level and earning status. On analysis with these variables the following findings were obtained:

1. The impact of occupational hazard is not significantly different for male or female employees. It means that the impact is same as to making them exhausted sleepless, losing appetite and sometimes even have to take the help of medicines.
2. When it comes to the various age groups it has been confirmed that the impact has a significant difference when the employees belong to different age groups. The employees belonging to higher age groups are impacted by the hazards more than those belonging to lower age groups. This could be because of high commitments to the job as well as family that employees get stressed or exhausted soon.
3. The marital status has no influence when it comes to the impact of the hazards on the respondents. It means that whether an employee is married or not married makes no difference in the impact of the hazard.
4. In the case of the educational level of the respondents it was found from the data that the higher the education level the higher is the impact. This could be because that education has the potential to change the expectations, beliefs and behaviours. Few literatures also support this concept. (Feinstein, 2005). Hence higher expectations lead to higher impacts of hazards.

5. When the earning status of the employees with respect to whether they were the sole earners or shared earners was analysed in context to impact of occupational hazard it was found from the data that there was a significant difference in the impact of the hazard on the individual with respect to their earning status. It was found that the impact was quite higher for respondents who were sole earners. Where as in case of shared earners the impact was less. This could be because of the financial security of the respondents who were shared earners. Because of the existence of a partner who is also contributing to the financial needs of the family the respondents can have to some extent a carefree attitude enabling them to avoid all critical situations or exit for such unpleasant environment.

The impact of the occupational hazard after being analysed with the demographic variable were analysed with organisational variables like academic experience, mode of working, type or category of the organisation in which the respondents are working, the type of funding mode of the organisation, and also the position held by the respondents in their organisation. The findings obtained by this analysis are as follows:-

1. The analysis showed that the impact of the hazard has significant difference among the respondents with different groups of employee with different academic experiences. The higher the academic experience the higher is the impact. This could be because more responsibilities are entrusted to employees with higher academic experience. The greater the responsibilities the greater is the potential for the hazards and hence the impact.

2. The analysis of the impact of occupational hazard with respect to the working mode of the employees revealed a significant difference in case of employees who are permanently employed and who are temporarily employed. It has been found from the data that the employees who are permanently employed are having high potential of impact compared to temporary employees. As the temporary employees are quite free to avoid the unpleasant situations in their jobs either by changing the organisation or by remaining away from the situation.
3. The analysis or the impact of the hazard with respect to the organisation type revealed that there is significant difference in the impact of the hazard of different organisation categories. In West Bengal the hazard is near to negligible in case of primary schools and secondary schools. This could be because the employees of these categories of organisations do not perceive of any hazards as they are more comfortable working here because of leave policies and financial security. The responsibilities are also not much as the whole system is controlled by the government policies. Where as though the same facilities are present in colleges and universities, employees of these types of organisations are loaded with lots of responsibilities. Today Professors, Associate Professors and Assistant professors are entrusted with clerical duties like maintenance of attendance records, Defaulter's list, evaluation data, assessment data etc, administrative work, social work, counseling, mentoring, participation in conferences and workshops, paper publications, paper corrections, handling

examinations, working with students in their projects and also in private colleges additional responsibility is given to the professors to get students a type of marketing job also. Targets are there for all these activities and pressure is also given on them for these activities.

4. The data analysis has also revealed a significant difference in the impact of the hazard based on the funding agency of the organisations. In West Bengal there are both private and public players in the organisations belonging to the educational sector. The school is run by both state government and private organisations. Even in case of universities in West Bengal there are universities run by state government, private universities, deemed universities and also one university run by the central government. Hence the impacts of the hazards are different for organisations run by state government or private organisations.
5. There is significant difference in the means of the Impact of Occupational Hazards among the respondents working in different Positions in the Organisations. The data analysis in this perspective revealed that higher the positions occupied are more prone to the hazard and hence the impact is also high. It is quite evident that employees who occupy higher positions in the organisations have more responsibilities and commitments to their jobs. Hence more the responsibility more prone to hazards likes stress and burnouts.

One more important finding that was observed from this study is that the personality trait that emerged as maximum number among the respondents is

ESTJ. As per the definition of the personality traits from Annexure- IV ESTJ means Extraverted Thinking Sensing and Judging. Robert Heyward suggests in his personality page that ESTJ's primary mode of living is focused externally where they deal with issues rationally and logically. Their secondary mode is internal where they take things via five senses in literal and concrete fashion. These people live in a world of facts and concrete needs. They have a clear set of standard beliefs. They are extremely talented at devising systems and plans for actions. They are self confident and aggressive. They are usually considered as model citizen and pillars of the community. The weaknesses of this trait are:-

1. Tendency to believe that they are always right.
2. Tendency to need to always be in charge.
3. Tendency to be materialistic and status conscious
4. Generally uncomfortable with change and moving into new territories.
5. Not naturally in tune with what others are feeling.

The next emerging personality trait is ISTJ. ISTJ as per Annexure - IV means Introverted Sensing Thinking Judging. ISTJ's are quiet and reserved individuals who are interested in security and peaceful living. They are very loyal, faithful and dependent. They believe in laws and traditions and insist on doing things "by the book". The weaknesses of this trait are:-

1. Tendency to believe they are always right.
2. Tendency to get involved in win-lose conversation.
3. Not naturally in tune with what others are feeling.
4. Their value for structure may seem rigid for others.

Various researchers have suggested that the careers chosen by people belonging to ESTJ personality types are law, human resources, and training, nursing, management, project management and administration. Careers chosen by most of people with personality traits of ISTJ are medical, science, engineering, analysis, accountancy, academia, law, computing, and project management.

On analysis of the demographic variables and organisation variable the analysis focuses on the sources of the hazards. Three groups of sources were identified. They are individual and organisational sources, stakeholder related sources and task related sources.

The research started with 13 variables of individual and organisational sources, 24 variables of stakeholder related sources and 7 variables of task related sources. On applying correlation among these variables it was found that there was multi-co linearity problem among the variables. So to reduce the variables factor analysis was done. The factor analysis reduced individual and organisational variables into 4 factors, stakeholder related variables into 6 factors and task related variables into 3 factors. So the research identified 7 + 4 + 3 = 14 factors as sources of the hazards in the education sector of West Bengal. These 14 factors are entity interface, work structure, work environment, policies, and transparency in organisation, stakeholder administrative issues, stakeholder interface, stakeholder policies, student control, parent control, task control, task density and task conflict.

These 14 factors were then analysed using a linear regression model. The model derived the significant sources for the hazards as Task Conflict, Task

Control, Student Control, Stakeholder Interface, Transparency in Organisation and Work Environment. Hence these sources have a great role to play in either escalation or de-escalation of the hazards.

Let us examine the factors individually to enhance the understanding of how the sources are very significant in their influence in creating the potential to the occupational hazards.

The first factor that was highly significant in escalating the occupational hazard is task conflict. It is quite evident from the study that the employees of the education sector of West Bengal are involved in multiple and yet diverse tasks. There is always a probability as to the expectations and demands of each task. Many times it is seen the objective of one task is conflicting with the other task. For example today in most private organisations in the education sector apart from teaching which being the core task of any teachers they are entrusted with tasks like marketing or placement. Where the performance is monitored based on their numbers of achievements. To increase the number of admissions they are compelled to compromise on quality of the students. This conflicts with their objective of training students for good academic results and also in various skills. This conflict issues in their task creates hazards like student aggression, stress, false accusation etc.

The second factor that emerged from the study as significant in predicting occupational hazard is task control. It is quite clear from the definition of task control that an employee can achieve the best performance when he or she possesses all the necessary competencies and tools to do the job. In most of the cases it is not so when it comes to the recruitments in West Bengal

education sector. Most of the recruitments happen to those candidates who have political affiliations with the ruling party (Primary Teachers Recruitment Scam in West Bengal, 2016). Their ability and competencies are not tested. Hence the task control becomes a major factor in creating occupational hazards in the education sector of West Bengal.

The third predictor that emerged as a significant source for the occupational hazard is the student control. It is a very common scenario in West Bengal where we find students becoming aggressive to the extent that they even manhandle the school headmaster and ransack his office (Banerjie, 2015). These incidents lead to campus violence and also become serious hazards to the employees of those organisations.

The fourth significant predictor of the occupational hazard in West Bengal is the stakeholder interface. The organisations belonging to the education sector has a number of stakeholders. These are people or organisations with a stake or interest in education. A category of stakeholders are those who have immediate and direct interest in education. This group consists of students, parents, educators, and governing bodies, potential employees etc. Each of these stakeholders has different interests and expectations. To meet these expectation and do the job smoothly becomes quite challenging to the employees and hence is exposed to various types of hazards.

The fifth significant predictor for occupational hazard is transparency in the organisation. It is known to all and also supported by many researchers that transparency is a key to performance both of the organisation and also its employees nicely coined by David Gebler in his blog business ethics, culture

and performance in 2011. Transparency in organisation implies visibility into the functions of the organisation to its stakeholders. Today organisations can use the new information technologies to increase the transparency in the organisation. In spite of this to increase transparency the management and the employees require to change their existing behavior and practices which threatens people of their security. Absence of transparency can lead to duplicate work, bad decision making and inability to innovate. Hence absence of transparency has a high probability to increase the occupational hazards of the employees of the organisations.

The sixth significant predictor of the occupational hazards in an organisation is its work environment. Many researchers have supported the fact that an unhealthy work environment creates more stress and lowers employees well being. If the work environment is not supportive it can lead to increased absenteeism, withdrawal behavior, conflict, strain and greater risk of accidents, incidents and injuries. The most adequate work environment is having trust, honesty and fairness.

After the analysis of occupational hazard and the sources of the occupational hazard we now focus on the coping strategies adopted by the personnel to cope with the hazards. A very interesting finding in this case is that the coping strategies that are adopted by the individual to cope with the occupational hazard are a combination of multiple coping strategies. As per the theory of Niedl (1996), Zapf and Gross (2001) the individuals adopt avoidance strategies in the beginning of the hazards. But the finding of this study says that most of the individuals adopt to the problem focused strategies. As per the

descriptive statistics the coping strategies with the highest to the lowest means are in the order of Problem solving, Cognitive restructuring, Social support, Express emotion, Wishful thinking, Social withdrawal, Problem avoidance, Political and Self Criticism respectively. Coping strategies are basically a conscious effort to solve problems of both personal and inter-personal nature to overcome, minimize or tolerate any hazards like stress or conflict. As per various researches the two main types of coping strategies are emotion focused and problem focused coping.

The emotion focused coping changes a person's emotional response to stressor's. Emotion focused coping techniques are focused on reducing the negative emotional responses, an individual might experience because of stressors. Normally the type of behavior visible in the case of emotion focused coping strategies is letting off steam by venting to friends and family, Keeping busy to keep the mind away from the stressors, Seeking encouragement, moral support, sympathy and understanding from others, turning to rigorous activities like sports to distract attention from stressors etc. People are more likely to adopt emotion focused coping when they don't think their actions can affect the stressor itself, so they alter their response to the stressor. Coping strategies belonging to the group of emotion focused strategies include Express emotion, Social Support, Self Criticism and Social Withdrawal.

The problem focused coping strategy is about trying to deal with the stressor itself so as to avoid the stress response it is causing. Problem focused coping involves finding practical ways to deal with stressful situations. Some behaviours administered by individuals who adopt this coping strategy include

put other activities on hold in order to concentrate and cope with the stressor, Actively try to remove or work around the stressor, Wait to act until the appropriate time, Seek concrete advice, assistance and information etc. This coping method is more common when individuals believe that the action can affect the stressor. Coping strategies belonging to the group of problem focused strategies include Problem solving, Cognitive Restructuring, Problem avoidance, Wishful thinking and Political.

After understanding the coping strategies adopted by the individuals the next analysis was to find the demographic and organisational factors which are influencing the employee to adopt the particular coping strategy.

On analysis of the demographic variables with the coping strategies it was found that the variables like gender, age group and educational level of the employees are significantly associated with the coping strategies. To analyse individually gender is significantly associated with the coping strategy of self criticism only. Age group of the employees is significantly associated with coping strategies like problem solving, cognitive restructuring, express emotion, problem avoidance and self criticism. Educational level is significantly associated with all the nine coping strategies. Hence we can say that the factors which enable an individual to adopt a particular coping strategy are employee's age and their educational level. Many relations between personality and coping were stronger in older samples.

On analysis of Organisational variable with coping strategies it was found that the variables like organisation type, the funding agency of the organisation and the position held by the employees are significantly associated with the coping

strategy adopted by them. Out of these three variables the organisation type is significantly associated with only one coping strategy that is wishful thinking. The other two variables like funding agency of the organisation and the position held by the individual is significantly associated with all the nine coping strategies.

Many researchers have supported the theory that individuals who were post graduates, individuals who were in the position of head of the department or organisation and individuals with greater work experience adopted the problem focused coping strategies to a greater extent. Another research also stressed on the fact that the female employees adopted emotion focused strategies to a greater extent.

The study also revealed that the personality trait of an individual has a greater influence in the adoption of the coping strategy by the individual. Personality influences coping in many ways. Even prior to coping, personality influences the frequency of exposure to hazards and also the type of hazards experiences. We have from theories that neuroticism predicts exposure to interpersonal stress and tendencies to appraise events as highly threatening.

7.2. CONCLUSIONS

The research can be concluded by revisiting the objectives of the research and finding out whether the research has fulfilled these objectives.

The first objective of the research was to provide the discussion on occupational hazards faced by the employees working in white collar jobs in

the educational sector in West Bengal. To this there was in-depth interview taken with ten different employees working in different positions in different organisations. The discussion resulted in highlighting few of the hazards like burnouts, campus violence, stress and false accusations. Among them majority spoke of burnout. According to the respondents the cause for the burnouts was due to job overload, meeting expectations of management and peers, students and their guardian's etc. The respondents working in schools spoke of musckulo-skeletal disorders (MSD) due to the board work and furniture's used in the schools.

The second objective was to review and summarize the impacts of these occupational hazards on the employees. The research results showed that the highest impact was on health and they had to take medicines for hypertensions etc. Most of the people complained of sleeplessness, exhaustion, and boredom and losing interest in the job. Few of them also complained that such unpleasant situations have damaged their relationships with their colleagues. According to self reporting the employees spoke of difficulties in maintaining work – home balance.

The third objective was to identify the factors causing occupational hazards to the employees working in education sector. According to the in-depth interview of the respondents and their perception of the factors causing the hazards are grouped into three categories. They are general factors, stakeholder related concepts and task related concepts. The factors belonging to the group of general categories are organisational policies, management issues, job profile, job security, organisational politics, student handling,

parents and outsiders interactions. The outsiders are political parties, community etc. The factors belonging to the stakeholder concepts are stakeholder multiplicity, interface, complexity, administration and operating paradigm. The task related concepts involve factors like task ambiguity, task complexity, task description and task control.

The fourth objective is to identify and prioritise the sources of these hazards. According to the study result it was found that the most significant sources of the hazards are task conflict, task control, and student control, stakeholder interface and campus culture. Among these the highest in priority is in the order is stakeholder interface, task conflict, student control, task control and campus culture.

The fifth objective was to analyse the coping strategies adopted by the employees of education sector. The study showed that the major and common coping strategies that are adopted by the employees of education sector were problem solving, cognitive restructuring, social support and express emotion. Though it was found from the study that an individual uses a combination of coping strategies to cope with unpleasant situations in their work, but few strategies that were mentioned above were commonly used by most of the employees to cope with their problems.

The sixth objective was to analyse the factors influencing the coping strategy. The qualitative analysis revealed that personality trait and experience in this sector has a major influence on the coping strategies. The quantitative analysis revealed that personality trait if the employee, funding agency of the organisation, position held by the employee in the current organisation and

education level of the employee are the important and major factors influencing the employees selection of coping strategies to cope with any unpleasant situation.

These findings may have some important implications regarding the interventions in the hazards at work. Accordingly, the organisation as a whole needs to be aware of the consequences of occupational hazards and confronting these hazards within a problem-focused framework. Therefore training managers, supervisors and employees should identify the pattern of the hazards and help to stop the destructive behavior of the respondents being the stakeholders of these hazards.

Furthermore, by developing preventive programmes at the organisational level and by establishing effective and safe grievance procedure organisations can intervene to prevent or mitigate the impact of occupational hazards.

The results point to the need of Government policies targeting specifically to towards the employees working in the education sector if there has to be tangible improvements in the quality of education in West Bengal.

7.3. RECOMMENDATIONS:

On the basis of my research results the following recommendations can be made:-

1. The research report highlights the major personality type the employee's posses in the education sector. This information can be used to recruit the employees in this sector.

2. The report also investigates the different occupational hazards and its impacts on the employees facing them. This information can be used in induction training programmes to make the new recruits aware of the problems and consecutive solutions.
3. The research report also prioritises the different sources which could predict the occupational hazards. This information can be used to de-escalate the impacts of the occupational hazard.
4. The knowledge of health hazards mentioned in this report could help the policy makers to focus on the health and safety issues of the employees working in this sector.
5. The report also brings out the information of various coping strategies adopted by the employees in education sector. This could be further analysed and used for training the employees to overcome the unpleasant situations experienced in their job making them more successful in the tasks they are to perform.

7.4. CONTRIBUTIONS:

To sum up the present research contributes to the occupational hazard in education sector researches by describing the process of occupational hazards in which the employees coping strategies to these hazards are analysed. This research reports the existence of different hazards in the education sector and also its impacts on different employees are different. The research also identifies that the variable which influence the adoptions of coping strategies. Employees can be trained in adopting specific coping strategies for specific

hazards to become successful in their career. This research report also contributes the knowledge of important sources of the identified hazards. This knowledge will help the policy makers to make policies for the well being of the academic employees. Education sector being one of the service sectors, this research can give direction to analyse the other hazards of the service industry and what could be the possible coping strategies to make the employees successful in their jobs.

7.5. LIMITATIONS:

The limitations of this research are:

1. Self-reporting on survey questions was dependent on the participation and honesty of the respondents.
2. The willingness of interviewees to share truthful information may have been limited by current employment status within the institution.
3. Maslach et al. (1996) recommend that subjects should not be sensitized to the topic of occupational hazard since it may influence their responses. However, to ensure transparency, participants were made aware of the nature of this study.
4. Although the sample size is comparable to most of the studies, where the population is above fifty thousand, still it is relatively small to give a clear picture of all the categories of educational institutions.
5. Nearly 50% of the sample is represented by the employees working in universities. Hence it would not be appropriate to generalize the study across all other educational institution categories.

6. The potential risk of response bias could be another limitation. Since the exploration of interaction between coping strategies and occupational hazard process mainly depends on respondent's perception, feelings and reactions.
7. Focusing on the education sector only one personality trait that is ESTJ has emerged as a major personality trait occupying more than 50% of the sample. Hence any analysis or co-relation with personality traits cannot be generalized.
8. Using the MBTI instrument to study the personality type of the respondent belonging to West Bengal poses several difficulties like:
    a. The MBTI was developed keeping the western culture in mind which might not align with the West Bengal culture, hence creating difficulty to the respondent to respond.
    b. The questions being presented in English language most of the respondents belonging to primary and upper primary schools of West Bengal have problems in understanding and comprehending the actual meaning of the questions.
9. The instrument for securing data being English large portion of the population of this research could not be approached as the majority of the population in West Bengal finds it difficult to apprehend and understand the questions to respond to the instrument.
10. Transforming qualitative research to quantitative form made the questionnaire very detailed and lengthy making the respondents fatigued and losing interest while responding. This resulted in more number of non-response and partially filled questionnaire.

11. Awareness of the idea of hazards and its remedies are so less as too many respondents perceive of no hazards in this profession. As a result there was a loss of rich data.
12. Personality does not constitute one trait at a time. Similarly hazard exposure and responses to hazards are influence not by one trait at a time but by all of personality at once.
13. Cumulative character of the hazard develops the impact of the hazard very slowly and after a period of time. Hence many respondents' responses were not the exact impacts.

7.6. SCOPE FOR FUTURE RESEARCH:

The quest for knowledge, solutions to problems and research questions leading to improved quality of life is synonymous with progress of human civilization. Whereas the current research provided answers to the research questions, it also highlighted its limitations in the previous section. This section provides brief directions for future researchers to pursue, in the domain of occupational hazards and coping strategies of the employees working in the service sector.

I. Future studies can be done by increasing the sample size of all the other categories of organisations belonging to the education sector to have an extensive understanding of the coping strategies and the occupational hazards.
II. Future research should explore joint and interactive impacts of multiple coping responses.

III. Future research can improve generalisability of the findings of this research by extending this study to include the following:

   a. comparing rural and urban areas for occupational hazards
   b. other geographies like different states

IV. Further research can be done on identifying the relation of personality types with the adoption of coping strategies including other instruments for measuring personality and coping strategies like:

   a. The 'Big Five' Factors i.e. the BFQ instrument
   b. Katherine Benziger's personality and brain-type theory

V. Future researchers are invited to enrich the research work by finding the relation of adoption of coping strategy to consequences faced directly linked to performance attributes.

VI. Time period of research being limited only for two years, future research can be done on seeing the escalation or de-escalation of the impact of occupational hazard over the period of the service tenure.

VII. Future research of similar type can be extended to other service sectors like: Hospitals, Hotels, Banks, IT services etc.

VIII. Recommendations are presented for future research can expand on the growing understanding of how personality and coping shape adjustments to hazards.

IX. Despite hundreds of studies the influence of personality and coping is only partly understood. Impediments include problems in the measurement of personality and coping.

X. Research should consider joint influence of traits on coping whether by examining personality profiles, controlling for one trait when studying others, or looking at interactions among the trait.

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ANNEXURE – I

QUESTIONNAIRE

PART - A

SECTION 1 – DEMOGRAPHICAL INFORMATION:

1.	Gender:	□ Male □ Female
2.	Age:	□21 – 30 □31 – 40 □41 – 50 □51 – 60 □Above 60
3.	Marital Status:	□Unmarried □Married □Divorcee □Widow/Widower
4.	Education Level:	□Graduate □Post Graduate □Post Graduate+ □PhD
5.	Earning Status:	□Sole Earner □Shared Earner

SECTION 2 – OCCUPATIONAL INFORMATION:

1.	Academic experience:	□ Less than one year □ 1 to 5 years □ 6 to 10 years □ 11 to 15 years □ greater than 15 years (____) indicate in years
2.	Working in this organisation for	last …..years
3.	Working mode:	□ Permanent □ on Probation □ Visiting □ Retired
4.	Organisation status:	□ Primary school □ Secondary school □Higher secondary school □ College □ University □Professional institute □ others _____
5.	Organisation financial type:	□Government □ Aided □Private □others_____
6.	Position held currently:	□ Headmaster / Principal / Dean / Head of institution □ Teacher / Lecturer □ Librarian / Reader □ Professor □ Administrator □ Researcher □ others _____

SECTION 3 – PERSONALITY RELATED INFORMATION: (MBTI instrument)

Describe yourself as you honestly see yourself, in relation to other people you know by ticking the correct option,

1. At a party do you: a. Interact with many, including strangers b. Interact with a few, known to you	**2. Are you more:** a. Realistic than speculative b. Speculative than realistic
3. Is it worse to: a. Have yourself disconnected from day-to-day issues and have peace by dreaming of better things b. Be in a place where it is not possible to change anything	**4. Are you more impressed by:** a. Principles b. Emotions
5. Are more drawn toward the: a. Convincing b. Touching	**6. Do you prefer to work:** a. To deadlines b. Just "whenever"
7. Do you tend to choose: a. Rather carefully b. Somewhat impulsively	**8. At parties do you:** a. Stay late, with increasing energy b. Leave early with decreased energy
9. Are you more attracted to: a. Sensible people b. Imaginative people	**10. Are you more interested in:** a. What is actual b. What is possible
11. In judging others are you more swayed by: a. Laws than circumstances b. Circumstances than laws	**12. In approaching others is your inclination to be somewhat:** a. Objective b. Personal
13. Are you more: a. Punctual b. Leisurely	**14. Does it bother you more having things:** a. Incomplete b. Completed
15. In your social groups do you: a. Keep abreast of other's happenings b. Get behind on the news	**16. In doing ordinary things are you more likely to:** a. Do it the usual way b. Do it your own way
17. Writers should: a. "Say what they mean and mean what they say" b. Express things more by use of analogy	**18. Which appeals to you more:** a. Consistency of thought b. Harmonious human relationships
19. Are you more comfortable in making: a. Logical judgments b. Value judgments	**20. Do you want things:** a. Settled and decided b. Unsettled and undecided
21. Would you say you are more: a. Serious and determined b. Easy-going	**22. In phoning do you:** a. Rarely question that it will all be said b. Rehearse what you'll say
23. Facts: a. "Speak for themselves" b. Illustrate principles	**24. Are visionaries:** a. somewhat annoying b. rather fascinating
25. Are you more often: a. a cool-headed person	**26. Is it worse to be:** a. unjust

b. a warm-hearted person	b. merciless
27. Should one usually let events occur: a. by careful selection and choice b. randomly and by chance	**28. Do you feel better about:** a. having purchased b. having the option to buy
29. In company do you: a. initiate conversation b. wait to be approached	**30. Common sense is:** a. rarely questionable b. frequently questionable
31. Children often do not: a. make themselves useful enough b. exercise their fantasy enough	**32. In making decisions do you feel more comfortable with:** a. standards b. feelings
33. Are you more: a. firm than gentle b. gentle than firm	**34. Which is more admirable:** a. the ability to organize and be methodical b. the ability to adapt and make do
35. Do you put more value on: a. infinite b. open-minded	**36. Does new and non-routine interaction with others:** a. stimulate and energize you b. tax your reserves
37. Are you more frequently: a. a practical sort of person b. a fanciful sort of person	**38. Are you more likely to:** a. see how others are useful b. see how others see
39. Which is more satisfying: a. to discuss an issue thoroughly b. to arrive at agreement on an issue	**40. Which rules you more:** a. your head b. your heart
41. Are you more comfortable with work that is: a. contracted b. done on a casual basis	**42. Do you tend to look for:** a. the orderly b. whatever turns up
43. Do you prefer: a. many friends with brief contact b. a few friends with more lengthy contact	**44. Do you go more by:** a. facts b. principles
45. Are you more interested in: a. production and distribution b. design and research	**46. Which is more of a compliment:** a. “There is a very logical person.” b. “There is a very sentimental person.”
47. Do you value in yourself more that you are: a. unwavering b. devoted	**48. Do you more often prefer the** a. final and unalterable statement b. tentative and preliminary statement
49. Are you more comfortable: a. after a decision b. before a decision	**50. Do you:** a. speak easily and at length with strangers b. find little to say to strangers
51. Are you more likely to trust your: a. experience b. hunch	**52. Do you feel:** a. more practical than ingenious b. more ingenious than practical
53. Which person is more to be complimented – one of: a. clear reason b. strong feeling	**54. Are you inclined more to be:** a. fair-minded b. sympathetic
55. Is it preferable mostly to: a. make sure things are arranged b. just let things happen	**56. In relationships should most things be:** a. re-negotiable b. random and circumstantial
57. When the phone rings do you: a. hasten to get to it first b. hope someone else will answer	**58. Do you prize more in yourself:** a. a strong sense of reality b. a vivid imagination

59. Are you drawn more to: a. fundamentals (tangible explicitly stated things) b. overtones (implicit unstated ideas expressed as hints or clues)	**60. Which seems the greater error:** a. to be too passionate b. to be too objective
61. Do you see yourself as basically: a. hard-headed b. soft-hearted	**62. Which situation appeals to you more:** a. the structured and scheduled b. the unstructured and unscheduled
63. Are you a person that is more: a. routinized than whimsical b. whimsical than routinized	**64. Are you more inclined to be:** a. easy to approach b. somewhat reserved
65. In writings do you prefer: a. the more literal(explicit precise writing style (to the point)) b. the more figurative(figurative writing style, with a poetic touch)	**66. Is it harder for you to:** a. identify with others b. utilize others
67. Which do you wish more for yourself: a. clarity of reason b. strength of compassion	**68. Which is the greater fault:** a. being indiscriminate b. being critical
69. Do you prefer the: a. planned event b. unplanned event	**70. Do you tend to be more:** a. deliberate than spontaneous b. spontaneous than deliberate

PART - B

SECTION 4 –KIND OF OCCUPATIONAL HAZARD FACED:

Occupational Hazard: "an occupational hazard is something unpleasant that you may suffer or experience as a result of doing your job"

Some of them are listed below:-

1. Never
2. Rarely
3. Occasionally
4. Sometimes
5. Frequently
6. Usually
7. Every time

Sr.No	Occupational Hazard	1	2	3	4	5	6	7
1.	My health suffered due to the problem							
2.	I had to go to take medicines.							
3.	My regular work suffered due to the problem.							
4.	My relationship with colleagues suffered due to the problem							
5.	My family also got stressed due to the problem.							
6.	I have emerged totally shaken up from that episode.							
7.	I suffer from anxiety due to the problem							
8.	I get tired due to the issues I handle							
9.	I suffer from injury due to the problem							
10.	I go into depression due to the problem.							

In case you faced any other problem which you consider it as worse and not listed above do mention in detail.

_____

_____

_____

SECTION 5 – SOURCE OF OCCUPATIONAL HAZARD:

(PLEASE √ THE APPROPRIATE BOX)

1. Strongly Disagree
2. Disagree
3. Somewhat disagree
4. Neither agree nor disagree
5. Somewhat agree
6. Agree
7. Strongly agree

PROBLEM AREA	1	2	3	4	5	6	7
1.Educational policy or Policy of the Institution							
2. Pursuing further education							
3. Disciplinary work							
4. Guidance work							

5.Campus violence							
6.Career instability							
7. Management issues (tick the most problematic item and if possible give the description of the problem) a) Time pressure b) Arbitrary Decisions c) Unrealistic Expectations from Employees d) Not listening to suggestions e) Giving in to guardians' pressure f) Giving in to students Pressure g) Giving into outside pressures							
8.Work environment							
9.Family problem							
10.Organisational politics							
11.Students as source							
12.Gaurdains as source							
13.Outsiders as source (ex: political parties) Please mention outsider for you is _____							

SECTION 6 – STAKEHOLDER RELATED INFORMATION:

1. Did you have an opportunity to interact with the different stakeholders regarding any administrative issue? □ YES □ NO
2. What was the issue regarding which you interacted? (Descriptive answer)

_____

_____

_____

3. Regarding the issue or multiple issues for which you had to interact, did you interact with multiple offices/ departments or office bearers for dealing with different issues in your employer organisation? **YES** **NO**

(PLEASE √ THE APPROPRIATE BOX)

1. Strongly Disagree
2. Disagree
3. Somewhat agree
4. Neither agree nor disagree
5. Somewhat agree
6. Agree
7. Strongly agree

Description	1	2	3	4	5	6	7
4. In your organisation, for administrative issues, you know whom to approach for, so that you will not have to run around for resolution of the							

problem.							
5. In your organisation, processes for dealing with different administrative issues are well laid out and known to all employees							
6. In your organisation, processes for dealing with different administrative issues are known to you personally.							
7. In your organisation, for obtaining resources for teaching or academic related activities. You know whom to approach.							
8. In your organisation, processes Obtaining resources for teaching or academic related activities. Are well laid out and known to all employees							
9. In your employer organisation, processes for obtaining resources for teaching or academic related activities. Are known to you personally.							
10. In your organisation, for dealing with Student indiscipline you know whom to approach,							
11. In your organisation, for dealing with Student indiscipline a proper system is well laid out and known to all employees							
12. In your organisation, processes for dealing with Student indiscipline are known to you personally.							
13. In your organisation, for handling parents' queries, you know whom to approach							
14. In your organisation, processes for Handling parents queries are well laid out and known to all employees							
15. In your organisation, processes for handling parents' queries are known to you personally.							
16. In your organisation, for Handling outside interferences , you know whom to approach							
17. In your organisation, processes for Handling outside interferences are well laid out and known to all employees							
18. In your organisation, processes for Handling outside interferences are known to you personally.							
19. In your organisation, for Handling students groups/ unions, do you know whom to approach							
20. In your organisation, for Handling different students groups/ unions strategies are well laid out and known to all employees							
21. In your organisation, for Handling different							

students groups/ unions strategies are known to you personally.							
22. There are certain unstated rules and expectations which dealing with different offices/ officials.							
23. Policies and rules are followed consistently							
24. There is lot of unnecessary formality in working with the offices/ officials/ departments.							
25. There is power hierarchy maintained during working with the officials and during interactions.							
26. Officers/ departments communicate their requirements in clear and unambiguous terms.							
27. It requires multiple follow-ups to get the work done.							
28. The language different position holders' use is confusing sometimes in terms of the meaning.							

SECTION 7 – TASK RELATED INFORMATION:

(PLEASE √ THE APPROPRIATE BOX)

1. Strongly Disagree
2. Disagree
3. Somewhat Disagree
4. Neither agree nor disagree
5. Somewhat agree
6. Agree
7. Strongly agree

Situation	1	2	3	4	5	6	7
1. I suffer from Job overload.							
2. I have sufficient Job security							
3. I have sufficient control of how to do my work.							
4. I like the requirements and characteristics of my job.							
5. There are sufficient resources for doing my job satisfactorily.							
6. I know what the management expects out of me regarding my work.							
7. There are conflicts between different parts of my work. Say teaching and evaluation etc.							

PART - C

SECTION 8 – COPING METHODS FOR HAZARDS: (CSI Instrument)

Please read each item below and determine the extent to which you used it in handling the job hazard chosen by you.
(PLEASE √ THE APPROPRIATE BOX)

1. Strongly Disagree
2. Disagree
3. Somewhat Disagree
4. Neither agree nor disagree
5. Somewhat agree
6. Agree
7. Strongly agree

	1	2	3	4	5	6	7
1. I just concentrated on what I had to do next. The next step							
2. I tried to get a new angle on the situation							
3. I found ways to blow off steam							
4. I accepted sympathy and understanding from someone							
5. I slept more than usual							
6. I hope the problem would take care of itself							
7. I told myself that , if I wasn't so careless things like this wouldn't happen							
8. I tried to keep my feelings to myself							
9. I changed something so that things would turn out all right							
10. I looked for the silver lining, so to speak, tried to look at the bright side of things							
11. I did some things to get it out of my system.							
12. I found somebody who was a good listener							
13. I went along as if nothing were happening							
14. I hoped a miracle would happen							
15. I realized that I brought the problem on myself							
16. I spent more time alone.							
17. I stood my ground and fought for what I wanted.							
18. I told myself things that helped me feel better.							
19. I let my emotions go.							
20. I talked to someone about how I was feeling.							
21. I tried to forget the whole thing.							
22. I wished that I never let myself get involved with that situation.							
23. I keep in touch with influential people outside my organisation.							
24. I avoided my family and friends							
25. I made plan of action and followed it.							
26. I looked at things in different light and tried to make the best of what was available.							
27. I let out my feelings to reduce the stress.							
28. I just spent more time with people I liked.							
29. I didn't let it get to me;I refused to think about it too much.							

30. I wished that the situation would go away, or somehow be over with.							
31. I criticized myself for what happened.							
32. I used externally influential person to help me.							
33. I tackled the problem head on.							
34. I asked myself what was really important, and discovered that things after all were not so bad.							
35. I let my feelings out somehow.							
36. I talked to someone that I was very close to.							
37. I decided that it was really someone else problem and not mine.							
38. I wished that the situation had never started.							
39. I managed to get more resources to cope with the problem.							
40. I didn't talk to other people about the problem.							
41. I knew what had to be done, so I doubled my efforts and tried harder to make things work.							
42. I convinced myself that things aren't as bad as they seem.							
43. I got sufficient guidance from the leadership in solving the problem.							
44. I let my friends help out.							
45. I avoided the person who was causing the trouble.							
46. I had fantasies or wishes about how things might turn out.							
47. I realized that I was personally responsible for my difficulties and really lectured myself.							
48. I approached the senior influential colleagues to help me							
49. It was a tricky problem, so I had to work around the edges to make things come out ok.							
50. I stepped back into the situation and put things into perspective.							
51. My feelings were overwhelming and they just exploded.							
52. I asked a friend or relative I respect for advice.							
53. I made light of the situation and refused to get too serious about it.							
54. I hoped that if I waited long enough things would turn out ok.							
55. I kicked myself for letting things happen.							
56. I kept my thoughts and feelings to myself.							
57. I worked on solving the problems in the situation.							
58. I reorganized the way I looked at the situation, so things didn't look so bad.							
59. I got in touch my feelings and then let them go.							
60. I got help from the colleagues during the problem							
61. Every time I thought about it I got upset,; so I just stopped thinking about it.							
62. I wished I could have changed what happened.							
63. It was my mistake and I needed to suffer my consequences.							
64. I didn't let my family and friends know what was going on.							
65. I struggled to resolve the problem.							
66. I went over the problem again and again in my mind and finally							

saw things in a different light.							
67. I was angry and really blew up.							
68. I talked to someone who was in similar situation.							
69. I approached influential persons in the organisation to help me							
70. I thought about fantastic and unreal things that made me feel better.							
71. I told myself how stupid I was.							
72. I did not let others know how I was feeling.							

ANNEXURE – II

72 Statements distributed for the respective Coping Strategies along with the question number as appearing under the Section of Coping Strategy in the Questionnaire as in Annexure – I

Coping Strategy	**Statements as appearing in Questionnaire along with their Question Number.**
1.Problem Solving	**Q.No.1**. I just concentrated on what I had to do next. The next step **Q.No.9**. I changed something so that things would turn out allright **Q.No.17**. I stood my ground and fought for what I wanted. **Q.No.25**. I made plan of action and followed it. **Q.No.33**. I tackled the problem head on. **Q.No.41**. I knew what had to be done, so I doubled my efforts and tried harder to make things work. **Q.No.49**. It was a tricky problem, so I had to work around the edges to make things come out ok. **Q.No.57**. I worked on solving the problems in the situation. **Q.No.65**. I struggled to resolve the problem.
2.Cognitive Restructuring	**Q.No.2**. I tried to get a new angle on the situation **Q.No.10**. I looked for the silver lining, so to speak, tried to look at the bright side of things **Q.No.18**. I told myself things that helped me feel better. **Q.No.26**. I looked at things in different light and tried to make the best of what was available **Q.No.34**. I asked myself what was really important, and discovered that things after all were not so bad. **Q.No.41**. I knew what had to be done, so I doubled my efforts and tried harder to make things work. **Q.No.50**. I stepped back into the situation and put things into perspective. **Q.No.58**. I reorganized the way I looked at the situation, so things didn't look so bad. **Q.No.66**. I went over the problem again and again in my mind and finally saw things in a different light.
3.Express Emotion	**Q.No.3**. I found ways to blow off steam **Q.No.11**. I did some things to get it out of my system. **Q.No.19**. I let my emotions go. **Q.No.27**. I let out my feelings to reduce the stress **Q.No.35**. I let my feelings out somehow. **Q.No.51**. My feelings were overwhelming and they just exploded.

	Q.No.59. I got in touch my feelings and then let them go. **Q.No.67**. I was angry and really blew up.
4.Social Support	**Q.No.4**. I accepted sympathy and understanding from someone **Q.No.12**. I found somebody who was a good listener **Q.No.20**. I talked to someone about how I was feeling. **Q.No.28**. I just spent more time with people I liked. **Q.No.36**. I talked to someone that I was very close to. **Q.No.44**. I let my friends help out. **Q.No.52**. I asked a friend or relative I respect for advice. **Q.No.68**. I talked to someone who was in similar situation.
5.Problem Avoidance	**Q.No.5**. I slept more than usual **Q.No.13**. I went along as if nothing were happening **Q.No.21**. I tried to forget the whole thing. **Q.No.29**. I didn't let it get to me;I refused to think about it too much. **Q.No.37**. I decided that it was really someone else problem and not mine. **Q.No.45**. I avoided the person who was causing the trouble. **Q.No.53**. I made light of the situation and refused to get too serious about it. **Q.No.61**. Every time I thought about it I got upset,; so I just stopped thinking about it.
6.Wishful Thinking	**Q.No.6**. I hope the problem would take care of itself **Q.No.14**. I hoped a miracle would happen **Q.No.22**. I wished that I never let myself get involved with that situation. **Q.No.30**. I wished that the situation would go away, or somehow be over with. **Q.No.38**. I wished that the situation had never started. **Q.No.46**. I had fantasies or wishes about how things might turn out.. **Q.No.52**. I asked a friend or relative I respect for advice. **Q.No.62**. I wished I could have changed what happened. **Q.No.70**. I thought about fantastic and unreal things that made me feel better.
7.Self Criticism	**Q.No.7**. I told myself that , if I wasn't so careless things like this wouldn't happen **Q.No.15**. I realized that I brought the problem on myself **Q.No.31**. I criticized myself for what happened. **Q.No.47**. I realized that I was personally responsible for my difficulties and really lectured myself. **Q.No.55**. I kicked myself for letting things happen. **Q.No.63**. It was my mistake and I needed to suffer my consequences. **Q.No.71**. I told myself how stupid I was.
8.Social Withdrawal	**Q.No.8**. I tried to keep my feelings to myself

	Q.No.16. I spent more time alone. **Q.No.24**. I avoided my family and friends **Q.No.40**. I didn't talk to other people about the problem. **Q.No.56**. I kept my thoughts and feelings to myself. **Q.No.72**. I did not let others know how I was feeling.
9.Political	**Q.No.23**. I keep in touch with influential people outside my organisation. **Q.No.32**. I used externally influential person to help me. **Q.No.39**. I managed to get more resources to cope with the problem. **Q.No.48**. I approached the senior influential colleagues to help me **Q.No.60**. I got help from the colleagues during the problem **Q.No.69**. I approached influential persons in the organisation to help me

ANNEXURE – III

(Source: CPP Inc)

MBTI Instrument

The MBTI instrument contains four separate indices. Each index reflects one of four basic preferences which, under Jung's theory, direct the use of perception and judgment. The preferences affect not only what people attend to in any given situation, but also how they draw conclusions about what they perceive.

The MBTI instrument differs from many other personality instruments in these ways:

- It is designed to implement a theory; therefore the theory must be understood to understand the MBTI instrument.
- The theory postulates dichotomies; therefore some of the psychometric properties are unusual.
- Based on the theory, there are specific dynamic relationships between the scales, which lead to the descriptions and characteristics of sixteen "types."
- Identifying the MBTI Preferences

The main objective of the MBTI instrument is to identify four basic preferences. The indices E–I, S–N, T–F, and J–P are designed to point in one direction or the other. They are not designed as scales for measurement of traits or behaviors. The intent is to reflect a habitual choice between rival alternatives, analogous to right handedness or left-handedness. One expects to use both the right and left hands, even though one reaches first with the hand one prefers. Similarly, every person is assumed to use both poles of each of the four preferences, but to respond first or most often with the preferred functions or attitudes.

- The 16 Types
  As located on the Type Table

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

Scoring

	Col 1			Col 2			Col 3			Col 4			Col 5			Col 6			Col 7	
	A	B		A	B		A	B		A	B		A	B		A	B		A	B
1			2			3			4			5			6			7		
8			9			10			11			12			13			14		
15			16			17			18			19			20			21		
22			23			24			25			26			27			28		
29			30			31			32			33			34			35		
36			37			38			39			40			41			42		
43			44			45			46			47			48			49		
50			51			52			53			54			55			56		
57			58			59			60			61			62			63		
64			65			66			67			68			69			70		
				Copy to →						Copy to →						Copy to →				

	E	I		S	N		T	F		J	P	

1. Copy your answers to this answer key carefully.
2. Count the number of checks in each of the A and B columns, and total at the bottom.
3. Copy the totals for Column 2 to the spaces below the totals for Column 3. Do the same for
Columns 4 and 6.
4. Add totals downwards to calculate your totals.
5. Circle the letter with this highest score. This is your type.

ANNEXURE – IV

Definition of 16 Personality Traits

(Source: Centre for Application of Psychological Test)

(url: https://www.capt.org)

Jung's Theory of Psychological Types and the MBTI® Instrument

"The purpose of the Myers-Briggs Type Indicator® is to make the theory of psychological types described by C. G. Jung (1921/1971) understandable and useful in people's lives. The essence of the theory is that much seemingly random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefers to use their perception and judgment."

Extraversion–Introversion (E–I)

The E–I index is designed to reflect whether a person is an extravert or an introvert in the sense intended by Jung. Jung regarded extraversion and introversion as "mutually complementary" attitudes whose differences "generate the tension that both the individual and society need for the maintenance of life." Extraverts are oriented primarily toward the outer world; thus they tend to focus their perception and judgment on people and objects. Introverts are oriented primarily toward the inner world; thus they tend to focus their perception and judgment upon concepts and ideas.

Sensing–Intuition (S–N)

The S–N index is designed to reflect a person's preference between two opposite ways of perceiving; one may rely primarily upon the process of sensing (S), which reports observable facts or happenings through one or more of the five senses; or one may rely upon the less obvious process of intuition (N), which reports meanings, relationships and/or possibilities that have been worked out beyond the reach of the conscious mind.

Thinking–Feeling (T–F)

The T–F index is designed to reflect a person's preference between two contrasting ways of judgment. A person may rely primarily through thinking (T) to decide impersonally on the basis of logical consequences, or a person may rely primarily on feelings (F) to decide primarily on the basis of personal or social values.

Judgment–Perception (J–P)

The J–P index is designed to describe the process a person uses primarily in dealing with the outer world, that is, with the extraverted part of life. A person who prefers judgment (J) has reported a preference for using a judgment process (either thinking or feeling) for dealing with the outer world. A person who prefers perception (P) has reported a preference for using a perceptive process (either S or N) for dealing with the outer world.

Index Preferences

Between E–I

E Extraversion or **I** Introversion - *Affects Choices as to* whether to direct perception judgment mainly on the outer world (E) or mainly on the inner world of ideas.

Between S–N

S Sensing perception or **N** Intuitive perception - A*ffects Choices as to* which kind of perception is preferred when one needs or wishes to perceive

Between T–F

T Thinking judgment or **F** Feeling judgment - A*ffects Choices as to* which kind of judgment to trust when one needs or wishes to make a decision

Between J–P

J Judgment or **P** Perception - *Affects Choices as to* whether to deal with the outer world in judging (J) attitude (using T or F) or in the perceptive (P) attitude (using S or N)

The Sixteen Types

According to theory, by definition, one pole of each of the four preferences is preferred over the other pole for each of the sixteen MBTI types. The preferences on each index are independent of preferences for the other three indices, so that the four indices yield sixteen possible combinations called "types," denoted by the four letters of the preferences (e.g., ESTJ, INFP). The theory postulates specific dynamic relationships between the preferences. For each type, one process is the leading or ***dominant*** process and a second process serves as an ***auxiliary***. Each type has its own pattern of dominant and auxiliary processes and the attitudes (E or I) in which these are habitually used. The characteristics of each type follow from the dynamic interplay of these processes and attitudes.

Processes and attitudes

- Attitudes refer to extraversion (E) or introversion (I).
- Processes of perception are sensing (S) and intuition (N).
- Processes of judgment are thinking (T) and feeling (F).
- The style of dealing with the outside world is shown by judgment (J) or perception (P).

In terms of the theory, people may reasonably be expected to develop greater skill with the processes they prefer to use and with the attitudes in which they prefer to use these processes. For example, if they prefer the extraverted attitude (E), they are likely to be more mature and effective in dealing with the world around them than with the inner world of concepts and ideas. If they prefer the perceptive process of sensing (S), they are likely to be more effective in perceiving facts and realities than theories and possibilities, which are in the sphere of intuition. If they prefer the judgment process of thinking (T), they are likely to have better developed Thinking judgments than feeling judgments. And if they prefer to use judgment (J) rather than perception (P) in their attitude to the world around them, they are likely to be better organizing the events of their lives than they are to experiencing and adapting to them. On the other hand, if a person prefers

introversion, intuition, feeling, and the perceptive attitude (INFP), then the converse of the description above is likely to be true.

ANNEXURE – V

Analysis of Text for Qualitative Analysis

Discovering of Theme and Sub-Theme & Describing the core and peripheral elements

Theme	Sub-Theme	Components
Occupational Hazard	Stress	• Low Energy, weakness, fatigue • Stomach Upset • Insomnia • Increased anger, frustration, depression
	False Accusation	• Loud voice criticism • Humiliation in front of others • Insulting comments
	Campus Violence	• Causing harm to any person • Damage of property • Cause of fear
	Muskulo-Skeletal Disorder	• Joint pains • Low back pain • Nerve compression • Tingling, numbness
	Burnout	• Exhaustion, • Lack of interest, • Reduced job performance
Source of the hazards	Organisational & Individual concepts	• Organisational policies, • Management issues, • Job profile, • Job security, • Organisational politics, • Students handling, • Relation with parents and • Relation outsiders like political parties interfacing with the employees and • Disturbances in family
	Stakeholder related concepts	• Stakeholder multiplicity level, • Stakeholder complexity level, • Stake holder interface and • Stakeholder administrations
	Task related concepts	• Task complexity, • Task ambiguity and • Task description.
Coping Strategies	Underestimation of the problem – avoidance	• Emotion Focused • Avoidance Strategies • Self-Criticism Strategies • Humour
	Losing patience – confrontation	• Confronting Strategies
	Perceiving threats to personal health – seeking support	• Social Support • Emotion Focused • Seeking Support
	Despair – destructive coping	• Emotion focused • Withdrawal • Attacking Behaviour
	Giving up – exit	• Resigning • Planning to Resign • Requesting to transfer to another branch, department or location.

ANNEXURE – VI

Some Interview Scripts

- I experienced huge frustration and I take it out on people. After coming home I have nothing left. It is a feeling of going to the class and afterwards feeling defeated. It is like battling every day like a war where you are attempting to win. Sometimes you win and sometimes you lose.
- My class is made up of boys and girls. It's very difficult to handle them, since they seem to competing with each other always to see who is the biggest and the strongest. They constantly keep talking to each other. I literally have to shout at them to be quiet. Sometimes it becomes so extreme that I start dreading so to face another day.
- I had a taken a semester once where I burned out every energy of mine badly. I was only getting half hours of sleep and I was also having some family problems at that time. The combination of the two, made me reach to the point where I just didn't want to get up and go to work in the morning.
- Many a times we may lose interest in our work like teaching after having worked for so long.
- I have seen that when someone is burned out, it effects his or her performance. The students also notice that the teacher is very much unhappy. This is the time when a teacher doesn't respond to student's queries well.
- I have also noticed that when someone gets burned out they start to exhibit not so pleasant behaviors or characteristics in class. They also fail to handle students They become very much critical of what they do a
- I was a witness to two cases of snapping.In one case several students came in late to a class. Normally we handle these cases with tardiness policy. But in this case the teacher was like, "Why are you even in college?!" . The teacher went off the deep end based on an incident that was relatively trivial. He just couldn't handle it. The second case was when student had filed a student concern or complaint saying that the teacher was not using appropriate language regarding race and ethnicity in his class. It was a humanities course. The teacher basically quit the job saying that he was unable to handle or cope with the student accusing him of not using proper language.
- Sometimes I feel like, what am I doing?. These students are not going to change. It becomes frustrating. I get frustrated because the standard of the students are actually not fit for the respective course.