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, organisa-
tional 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 of 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 musculo-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 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 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.