CHAPTER – 3

3. LITERATURE REVIEW

3.1 OVERVIEW:
Employees working in education sector are traditionally regarded as working in 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, provision and 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 the Institutions, Departments, Library, Computer Labs and Workshops. They have to 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 deteriorate their physical or mental health. 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, 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 non availability of 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 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 unsupportive parents, bellicose 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 continuously get exposed 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 an 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 Burnout, 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.

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.

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.