TEACHER STRESS, JOB PERFORMANCE AND SELF EFFICACY OF WOMEN SCHOOL TEACHERS

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BY

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Supervisor

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External Examiner

External Examiner

Dedicated to

MY TEACHERS

Who enabled me to achieve my goals as a student

&

MY STUDENTS

Who motivated me to serve and grow as a teacher

CONTENTS

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ABSTRACT

*The present research was conducted to identify levels and sources of teacher stress, teachers' job performance and self-efficacy of women school teachers. The study also explored the relationship between teacher stress, job performance and teacher self-efficacy. Another main objective of research was to find out the moderator role of self efficacy in teacher stress and job performance relationship. The research was carried out in three parts. Part I is concerned with the development and validation of scales. For the purpose of present research teacher stress inventory TSI, (Fimian, 1984) was adapted and translated into Urdu. This inventory is comprised of ten factors. Five factors measure the sources of stress and five factors measure the manifestations of stress. Level of stress are measured on the basis of total stress score. The process of translation and adaptation was completed in two phases. For translation, back translation method was adopted. The psychometric properties yielded TSI-Urdu a reliable and valid measure. The alpha reliability for the total scale was 0 .85. The internal consistency was further determined by inter scale correlations and item total correlations. Cross language validity was also determined. Another indigenous scale, TJPS was developed to measure teachers' job performance. The analysis revealed TJPS as a reliable and valid measure. Principal component factor analysis revealed four factors for this scale. They are TS (Teaching Skills), MS (Management Skills) DR (Discipline and Regularity) and IS (Interpersonal Skills). The sufficient content and face validity was also found through the ratings of judges. The alpha reliability for TJPS was 0.94. The split half reliability was also determined to strengthen the internal consistency i.e.,0.87. Inter-rater correlations were computed for the purpose of cross validation of students' ratings for their teachers. For this purpose correlation coefficient was computed between the ratings by students, headmistresses and self-rating of teachers. The significant positive correlation was found between ratings by students and headmistresses (r = 0.89**) and rating by headmistresses and self- ratings (r = 0 .62**). The third scale Teacher Efficacy Scale (TES; Ahmad, 2001) was modified*

for the purposes of present research, through a committee approach. Modified TES was consisted of 16-items with two subscales i.e., Personal Efficacy (PE) and Teaching Efficacy (TE). The alpha reliability coefficient was determined as 0 .72 for total and 0 .61 and 0 .81 for PE & TE respectively. Item total correlation yielded significant internal consistency of scales. Part-II of the research (Pilot Study) was carried out on a small sample, in order to pre-test the scales developed in part-I and to find out any flaws that may interfere in the findings Part-III of the present research was the main study that was carried out on a relatively larger sample to have more authenticity and generalizability of the research. Main study was carried out with two independent samples i.e., teachers and students. Sample I was comprised of 330 women secondary school teachers from government and private schools of three cities i.e., Islamabad, Rawalpindi and Chakwal. Sample II was selected from 9th and 10th classes of the schools selected in sample I. This sample was comprised of randomly selected 990 girl students. Results showed that teachers displayed moderate levels of stress, and highest scores were displayed on work related stressors. The significant negative correlation was found between teacher stress and job performance and teacher stress and teacher efficacy. The moderated multiple regression analysis revealed that high self-efficacy could play a moderator role in the relationship of teacher stress and job performance. The findings also showed that there were significant differences between government and private school teachers on levels of teacher stress, job performance and teacher efficacy. Government school teachers showed high levels of stress, poor job performance and low self efficacy as compared to private school teachers. The correlation was also found between teacher stress, job performance, self-efficacy and some job related and demographic variables i.e., marital status, family system, number of students, monthly income, age and job experience of teachers. T-test and ANOVA analysis showed differences between groups related to demographic variables. The findings indicated that these variables contribute significantly in teacher stress, job performance and self efficacy of women school teachers.

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INTRODUCTION

INTRODUCTION

Teaching is one of the most significant and visible profession in the world. All other professions in the society have their bases in the profession of teaching. As a profession it is the basis of the development of any country. Teachers are essential for the effective functioning of education system and for improving the quality of learning processes. Teachers play an important role in constructing the personality of their students. Schools are as important institutions as any other organization of the society. It can be reviewed as an interface, a platform where significant socialization of growing children takes place and where a sizable number of adolescent members of a society follow careers and meanings in their lives. Importance of profession is obvious however; the social and psychological conditions exert a strong influence on the levels of performance, job satisfaction and even on the mental health of teachers.

Teaching, as a profession involves a complex work environment, leading too much of stress. The job of being a teacher is both demanding and challenging. Teachers draw upon physical, emotional and intellectual resources in order to be effective in the classroom. Like all other professionals, teachers are also overwhelmed by multiple and complex challenges. They lag behind their counterparts in relations to the opportunities for self development and professional enhancement. In many parts of the world, teachers are rarely provided with the resources they need to meet the high demands and expectations placed on them. The long hours at work (as they supervise students' projects, evaluate students' work, prepare lessons and conduct the examination) coupled with pressures of their job environments eventually lead to debilitating health problems (Vaghn, 1990). Furthermore, the problems and hazards of society and particularly

education system are aggravating factors that may cause, and as a consequence, teachers may prone to experience stress.

Within the context of occupational stress, teacher stress has undoubtedly become an area of major interest to educationists and education policy makers throughout the world. Teaching has many intrinsic and extrinsic rewards for people entering the pedagogical arena. However, teaching is not without its inherent problems. Problems associated with job related stress remain at the top of many teachers' list. The wealth of research published on teacher stress has indicated that it is the number one health problem amongst teachers (e.g., Fimian & Fastenau, 1990). Historically, the duties and responsibilities of teachers have been viewed as demanding. Duties such as instructional planning, managing of students, behavior, interacting with other teachers and administrators professionally have continued to increase in both complexity and accountability. Accompanying stressors such as meeting with parents, grading and evaluating students, and administrative paper work requirements can produce a great amount of stressful situations for the teachers.

In this era when the problem of teacher stress has been recognized, it is the need of the time to identify dimensions of this problem in Pakistan, where teachers are definitely not enjoying their status as professionals, both in social and economic terms. The present research is an attempt to explore the phenomenon of teacher stress and its effects on job performance and self efficacy of teachers. The review of the literature on the teacher stress reveals that job performance and self efficacy are the most cited variables which are negatively affected by stress in teachers. The teacher stress is also related with some demographic variables such as the age, job experience, marital status, number of students in the class etc.

Concept of Stress

Stress is experienced by all in their everyday lives, in a wide variety of situations and settings. It is a natural and unavoidable feature of life experienced at one time or another by the vast majority of those engaged in professional work. Generally we agreed that stress is not just a uni-dimensional phenomenon. From whatever perspective we may view stress, is not limited to any particular sphere of an individual's life as it ranges from stressors present in his personal to his work life. Sanders (1983) concluded that although stress has become a part of our daily vocabulary but there exist considerable divergence among the various fields in which the concept is used with regard to its definitions and connotation.

Stress is basically, a word derived from the Latin word "Stringer" meaning to draw tight. The definitions of stress are many and varied, ranging from simple one word statement such as tension or pressure to medical explanations for the physiological response of the human body to certain stimuli. Ivancevich and Matteson (1996) found that stress has different meanings to different people.

From a lay person's perspective, stress can variously be described as feeling tense, anxious, worried, or having the blues. Scientifically these feelings are manifestations of the stress experienced an intriguingly complex programmed response to the perceived threat that can have both positive and negative results. There is general consensus however, that stress is a physical, mental or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures and similar stimuli. As commonly understood, stress is a pattern of disruptive, physiological and psychological reactions to events that threaten a person's ability to cope.

In historical review of stress literature Mason (1975) noted that despite the lack of agreement in the definitions of stress, the term was widely used in academic, clinical and lay settings. The literature review showed that there exist various classes of definitions (Cox, 1978; Lazarus, 1984; McGrath, 1976). Classically, theories of stress have also been partitioned into three types, i.e., stimulus oriented, response-oriented, and interactional or transactional theories (Coyne; Lazarus; & Holroyd; Stotland, as cited in Sarafino, 1990).

The stimulus-oriented theories identify stress as an aspect of the environment (a stimulus), which causes a strain reaction in the individual exposed to the stressful stimulus. These theories view stress as a potential residing within the stimulus provided by the organism's environment and those aspects of the environment that increase demands upon or disorganize the individual impose stress him or her (Cox, 1978; Lazarus & Folkman, 1984). This approach focuses on environment. We see this in people's reference to the source or the cause of their discomfort as being an event or set of circumstances –such as having "a high stress job". Events or circumstances that we perceive as threatening or harmful, thereby producing feelings of tension are called stressors. Researchers who follow this approach study the impact of wide range of stressors including (1) catastrophic events such as tornadoes and earthquakes (2) major life events such as the loss of a loved one or a job, and (3) more chronic circumstances, such as living in crowded or noisy conditions.

The response-oriented theories of stress consider stress to be the response of the individual or organism to the events of the environment (Balock; Canon; Duruna & Morgan, as cited in Bartlett, 1998). This approach treats stress as a response, focusing on people's reactions to stressors. Although response based definition of stress refers to stimulus, which lead to the stress response as stressors, they focus upon the occurrence of response as the actual stimulus itself (Selye, 1983). We see an example

of this approach when people use the word stress to refer to their state of tension, and when some one says "I feel a lot of stress when I have to give a speech". This response has two interrelated components. The psychological component involves behaviors through patterns and emotions as when you "feel nervous". The physiological component involves heightened bodily arousal –your heart pounds, your mouth goes dry, your stomach feels tight, and you perspire. The person's psychological and physiological response to a stressor is called strain

The interactional theories emphasize the characteristics of the organism as major mediating mechanisms between the stimulus characteristics of the environment and the response they invoke. In addition transactional or interactional approach emphasizes the significance of perceptual, cognitive, physiological and psychological components of individual with reference to environment (Cox, 1985; Lazarus & Folkman, 1984). The third approach describes stress as a process that includes stressors and strains, but adds an important dimension the relationship between the person and the environment (Lazarus & Folkman, 1984). This process involves continuous interaction and adjustments called transactions between person and the environment, with each effecting and being affected by the other. According to this view, stress is not just a stimulus or a response but rather a process in which the person is an active agent who can influence the impact of a stressor through behavioral, cognitive and emotional strategies.

Modern psychological conception of stress emphasize discrepancies between demands on an individual and resources for coping with those demands and focus on the psychological processes that lead to an event being experienced as stressful. When demands exceed resources, stress is considered to be the result.

Sarafino (1998) defines stress as the condition that results when person-environment transaction lead the individual to perceive a discrepancy – whether real or

not- between the demands of a situation and the resources of a person's biological, psychological and social systems. We can think of external events that would be likely to place demands on a person and that could lead to stress. These might include the demands of work, family, poverty or unexpected events to which a person has to adjust. We can also imagine 'internal' factors that might make a person more likely to respond in a stressful way to such events. These might include poor coping skills, less support, negative attributional styles or a number of attitudes and beliefs about one's self or the world. Psychological theories of stress has focused on the interactions between these internal and external factors, and the process of appraisal, by which the individual assess the seriousness of external events and the threat they pose as well as their own coping resources.

According to Jones and Bright (2001), stress should be used as an umbrella term that includes a range of potentially demanding environmental stimuli and responses and other variables, such as personality factors, that influence the relationship between the two.

In summary stress is not simply an environmental stimulus or a response to environmental demands, but a dynamic relational concept. There is constant interplay between the person and the environment, which is mediated by a complex set of ongoing cognitive processes.

Stress at Workplace

Stress is an unavoidable and dreaded, yet needed, part of every day life. Although life's stressors (e.g., meeting goals, making money, and caring for others) are usually thought of as only damaging to physical and mental health, they also motivate people to live actively and productively. Rowney and Cahoon (as cited in Rittmayer,

2001) called these stresses as emotional stresses, these stresses include: *time stress*, the pressure of doing something (or lots of things) before a certain time; *anticipatory stress*, worry and dread about impending events; *situational stress*, fear of finding one's self in a situation posing threat, loss of control, or loss of status in the eyes of others; and *encounter stress*, anxiety about dealing with people one finds difficult or unpleasant. A moderate level of stress is optimal.

Although jobs have always been to be at least a little stressful, including those emotional stresses, the workplace has become increasingly stressful over the last twenty years. In fact, the United Nations has labeled occupational stress "the 20th century disease" (Krohe, as cited in Rittmayer, 2001). Significant transformations in company organization, employee empowerment, and technological advances in the workplace have created stress that affects employees on every rung of the corporate hierarchy. According to Zaccaro & Riley (as cited in Rittmayer 2001), job stress is not all bad or all good; too little (that employees are at risk for boredom) or too much (that employees are at risk for burnout). Both boredom and burnout undermine job performance and satisfaction. Consequently, a moderate level of job stress is optimal as well.

The stress at workplace has gained much importance in the interests of stress researchers. Workplace stress can be defined as an emotional state that people experience in situations where they perceive an imbalance between the demands placed on them and their ability to meet these demands. Beehr and Newman (1978) defined stress as a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from normal functioning.

National Institute of Occupational Safety and Health (NIOSH, 1999) has more specifically defined work-related stress, as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities,

resources, or needs of the workers. Another definition of work related stress is as the emotional, cognitive, behavioral and physiological reaction to aversive and noxious aspects of work, work environments and work organizations. It is a state characterized by high levels of arousal and distress and often by feelings of not coping.

The Health and Safety Executive (HSE, 1995) defined work-related stress as the reaction people have to excessive demands or pressures, arising when people try to cope the tasks, responsibilities or other types of pressures connected with their jobs, but find difficulty, strain or worry in doing so.

Workplace stress is the result of the interaction between a person and the work environment. For the person it is the awareness of not being able to cope with the demands of their work environment, with an associated negative emotional response. Stressors are events or circumstances that lead to the feeling that physical or psychological demands are about to exceed his or her ability to cope. Stressors can be of several types. Stressors can be inherent in the job because of factors that make that occupation what it is — for example, the mixture of pressures in police work may be with the shift work, the threat of violence and sometimes dealing with emotionally repugnant material. Stressors can arise because of the way the job is organized. This may include physical factors (excess heat, noise, cold etc) as well as physiological factors that affect the body's balance (such as shift work, inadequate recuperative time etc). Stressors can also arise out of excessive work demands such as unrealistic deadlines, and can arise out of personal factors such as health status, relationships, ability to cope with difficult situations etc.

Occupationally related stressors tend to vary from job to job and from organization to organization. These stressors can be easily divided into three classifications. The first classification contains stressors that are common to a wide variety of jobs. This group includes issues regarding customer demands, time

constraints, and ineffective training. The second classification contains stressors that are common to a wide variety of organizations. This group includes issues related to absence of support from organizational superiors, non-competitive wage structures, poor job descriptions, and ineffective organizational motivational strategies. The third, and last, classification contains factors related to interdepartmental activities within an organization. This group includes issues such as poor cooperation, organizational politics etc. Occupationally related stressors also tend to evolve as changes occur in organizational environments, organizational staffing, and job tasks (Schaubroeck & Ganster, 1991).

Theoretical Models of Workplace Stress

The Person-Environment Fit Model

One of the earlier and most well cited models is the Person-Environment fit model. This approach can be traced back to Kurt Lewin and his notion of interactional Psychology. Lewin (1947) believed that human behavior is a function of an interaction between characteristics of the person and characteristics of the situation. One aspect of this interaction relevant to occupational stress is the degree to which there is a fit between the person and the situation. According to this theory, an employee perceives the work environment as stressful when there is a lack of fit between the person and his work environment. Occupational stress or strain results from interaction of an employee and his or her workplace; in other words, the degree of fit between a worker and his or her job determines the existence of job stress. Two types of interaction, or degrees of fit, are explored when assessing occupational stress: 1) the relationship between outcomes provided by the job and the needs, motives, or preferences of the individual, and 2) the relationship between the demands and requirements of the job and the skills and abilities of the worker. Application of the Person-Environment fit theory to the study of

occupational stress has spurred the creation of numerous, related measures of job characteristics, individual traits, and job satisfaction (Schaubroeck & Ganster, 1991).

Karasek's Demands-Control Model

A second, equally popular model to evaluate occupational stress is Demands-Control model presented by Karasek (1979). This approach posits that the most stressful situation in the workplace are those in which employee face heavy job demand but at the same time, are given little control over their work. This model gauges strain (stress) by the interaction of work pressures and demands and the decision latitude (control) of the worker. Thus, a job with very high demands and little to no control in decision making would be stressful–this happening is called the 'strain hypothesis'.

Demands refer to pressures to work hard or fast, excessive workloads, and conflicting priorities or responsibilities, and decision latitude, or control, concerns the worker's ability to control his or her work activities, including the authority to make decisions on the job (decision authority) and to select appropriate strategies to accomplish the job (skill discretion). Conversely, an individual presented with high demands and high control does not experience occupational stress; the pressure of high demands is negated or buffered by the element of control–this happening is called the 'buffering hypothesis.' Finally, research based on Karasek's Demand-Control model has found the lowest level of psychological well-being (i.e., the most stressed employees) exists among those workers experiencing high demands, low control, and low support (Schaubroeck & Ganster, 1991).

Siegrist's Effort-Reward Imbalance Model

Another approach to work stress, known as the Siegrist's Effort-Reward Imbalance model, suggests that occupational stress occurs when there is no reciprocation between the effort the worker puts in the job and the rewards he or she

receives (Vagg & Spielberger, as cited in Rittmayer, 2001). Hence, in accordance with this model employee who are dissatisfied or under-appreciated are more likely to feel stressed. Application of this model requires exploration of both management style and individual personality characteristics (e.g., affectivity).

Beehr and Newman's Facet model

Beer and Newman (1978) proposed a model of the work stress process. According to this approach, occupational stress can be broken down into a number of "facets" that represent categories of variables to be studied. The first facet is personal facet, it refers to stable characteristics that employees bring with them to the workplace e.g., demographic characteristics and personality etc. the other facet, environmental facet refers to those stimuli which are present in the environment and employees must confront with them e.g., characteristics of work performed (such as complexity) and nature of job related interpersonal relations. Next is process facet that refers to the interaction of characteristics of person and characteristics of the situation. This is the point where a person perceive work environment as stressful or not. After the environment is perceived as stressful, there may be a variety of consequences for both the individual and the organization as well. The final facet is time facet, which exhibit that the process of individuals' perception of stressor in the environment are embedded with temporal context

Lazarus's Transaction model

This model proposed that stress is a relationship between the person and the environment that is appraised by the person as relevant to his or her well-being and in which the person's resources are taxed or exceeded (Lazarus & Folkman, 1984).

Whereas the other theories generalize to groups of employees, Lazarus's transaction between individual and work environment model considers only individuals.

This model identifies stressful conditions and how the stressors are cognitively appraised by the individual (i.e., Are the stressors viewed as threatening? Do the stressors produce negative responses?). It also takes into account individuals' coping resources. For example, workers differ in the number of duties and deadlines they can successfully juggle at one time–some might be overwhelmed by four concurrent tasks whereas others can balance ten. The capabilities and resources an individual draws from determine the perceived amount of stress.

Teacher Stress

Within the scope of workplace, stress is a part of, and reflects a wider process of interaction between the person and his work environment. Much of the early writing on stress in general had led to a proliferation of different types of definition. It was thus not surprising that when writers tried to develop a definition of "job stress" in general, or of "teacher stress" in particular, this same proliferation would occur (Pithers, 1995). There are four major issues concerning to the development of a definition of teacher stress. The first issue is whether to use the term "teacher stress" to refer to the level of demands made on the teacher, or whether the term should refer to the emotional state engendered in a person in attempting to meet such demands. A second issue is, whether stress should refer to all demands (both positive and negative) or only to a negative one. The third issue involves the fact that teachers' emotional responses to their situation very much depends on their perception of situation and their coping ability. The fourth issue concerns how best to take account of the balance between the level of demands made on teacher, or the teachers' ability to meet such demands.

There have been many attempts to reach an adequate definition of teacher stress by a number of theorists and researchers. There is a growing consensus on the

definitions of stress as a negative psychological state with cognitive and emotional components, and on its effects on the health. Regarding to this view Teacher Stress is an experience of unpleasant emotions by the teacher, resulting from aspects of the teacher's job, which are perceived by him or her as threat to psychological and physical well being.

Kyriacou and Sutcliffe (1979) describe stress as a response syndrome of negative affect (such as anger and depression), usually accompanied by physiological changes (such as increased heart rate) resulting from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to his or her self-esteem or well being. Laughlin (1984) explained that, this definition reveals that the issue of teacher stress is one of the complex interactions of factors, whose results may well be the negative feelings that are associated with stress. A vital assumption inherent in the above definition is that an important contributory factor in the experience of stress in teachers is not only the aspects of the job, but also elements of the individual teacher – emphasizing the individual subjective perception of work experience.

According to Boyle et al. (1995), teacher stress may also be defined as a response of negative affect resulting from aspects of the teachers' job and mediated by the perception that the demands made upon the teacher constitute a threat to her /his well being. Given the role of cognitive appraisal, stress reactions can be determined by individuals' perception.

Prevalence of Teacher Stress

During the last 25 years there has been increasing professional and public interest in issues related to occupational stress and health and during the late 1960s this interest began to focus on those employed within the service sector, particularly on

those involved in education, health and welfare. Teachers have been popular target for such research, and from the late 1970s onward there have been many studies concerned with teacher stress (e.g., Dunham, 1984; Fimian, 1984; Hargreaves, 1978).

Over recent years, the problem of teacher stress has received increasing recognition (e.g., Borg, 1990; Borg & Falzon, 1993; Fontana & Abouserie, 1993). The wealth of research published on teacher stress over the last 20 years, has indicated that most teachers experience some stress from time to time, and that some teachers (somewhere between 20 – 25 %) experience a great deal of stress fairly frequently (Boyle et al., 1995; Chan & Hui, 1995; Cockburn, 1996; Travers & Cooper, 1996).

Kyriacou & Sutcliffe (1978, 1979) concluded that teachers perceived their job as very stressful or extremely stressful. The results of these four studies also showed that the level of self- reported stress was related to workplace and not to the biographical characteristics of teachers. Winkinson (1988) suggested that teaching is a profession where practitioners are subjected to a high incidence of potentially stressful situations. Nattrass (1991) defined stress as the number one health problem amongst teachers.

In several surveys results have revealed that up to one third of teachers regard teaching as highly stressful (Solman & Feld, 1989; Spooner, 1994). Stress has been identified as a major problem in 9 out of 10 UK workplaces (Warren & Towel, 1995) leading to rising absenteeism and low morale among staff, and this is particularly true for teaching. In US, high school teaching is now ranked number one stress full job. In the same way studies under taken in Australia and Newzealand have also found high levels of stress among school teachers (Otto, 1982).

Numerous studies have been reported that have been looked at particular subgroups of teachers: primary and secondary school teachers (Chaplain, 1995; Manthei & Solman, 1996), newly qualified teachers, headteachers (Cooper & Kelly,

1993; Friedman, 2000), teachers of vocational courses, experienced teachers, teachers of mathematics, group home staff, teachers of the mentally retarded, emotionally disturbed, and learning disabled students head teachers etc. (Capel, 1997; Fimian, 1984; Fimian, Pierson, & McHardy, 1986; Male & May, 1997; Morton, Vesco, Williams, & Awende, 1997; Tuck et al., 1999). All studies show higher level of stress in teachers.

Studies comparing teachers with other professional occupations using a variety of measures (attitudinal, physiological, behavioral, and medical) indicate that teaching is one of the high stress professions (Health Education Authority, 1988; Travers & Cooper, 1996). Cooper (1980), in his classification of several occupations in terms of the degree of stress that they cause on the employees, indicated that, as far as the occupations of social welfare are concerned, teachers experience the highest levels of stress.

All above mentioned studies show that Teacher Stress has undoubtedly become an area of major interest to educationist and researchers. Nevertheless, it is well recognized that teachers' job is difficult one and number of factors make it stressful.

Estimating the extent of teacher stress is difficult because there is no widely accepted objective measure of stress, while a variety of objective measures have been used, each is subjected to major shortcomings and limitations. Physiological measures, for example, are easily influenced by factors other than stress or by differences between individuals in how they reflect stress. Behavioral measures such as absenteeism, leaving the profession or ill health are also prone to influence by too many other factors. As a result of the difficulties in obtaining objective measures of teacher stress, much of the research on estimating the extent of teacher stress has relied on some form of self-report questionnaire. A variety of such instruments have developed over the years (i.e., Fimian, 1984; Kyriacou, 1997; Pratt, 1978). Surveys

indicate that teachers report experiencing stress at work more than the majority of the other professions. Nevertheless, despite the various shortcomings of such self- report data, the large number of studies reported of teacher stress does indeed suggest that teaching is one of the most stressful of the professions.

Perspectives on Teacher Stress

The problem of teacher stress is a serious one, and it is evidently important to view it from a multivariate perspective. Cox (1978) defined stress in terms of (1) the external environmental stimulus characteristics (2) individual's emotional states (3) an interaction variable emphasizing the relationship between individuals and their environment. Based on the classical theories of stress (Lazaruz, 1984), Beehr and Newman (1978) proposed three perspectives for viewing occupational stress: the personal characteristics which are thought to cause or contribute to stress; the environmental characteristics which are the causal agents of stress; the interaction between the individual and the environment together with the stress generated by this interaction.

In line with Beehr and Newman and Cox's three perspectives of occupational stress, Dunham (1984) identified three major approaches to understanding the nature of stress in teaching. The *first* model 'engineering model' of stress, based on the stimulus oriented theories of stress, looks at the pressures exerted on teachers in schools. This model presents stress as the load or demand placed upon a person which exceeds the limits of the individuals' capacity to adapt to it. Teachers, in this model, are perceived as subjects who operate in such situations which may give rise to demands beyond their adaptive limits. The *second,* 'physiological model' of stress, based on the response oriented theories of stress, focuses on the teacher's reactions and coping resources which teachers use in their attempts to cope with stress. Teachers are

again perceived as subjects to whom pressures are applied and as a consequence response is aroused. The *third* 'interactional / transactional model' conceptualizes stress as the product of a complete transaction between individual needs / resources and environmental demands and constraints. This model is based on the interactional theories of stress. This model perceives stress as interactive and situational. It recognizes that on the one hand, teaching as a profession and some schools in particular may exert pressures on teachers; while on the other, individual teachers react in different ways and bring a variety of adaptive resources to help them to cope with those pressures.

Keeping in view the phenomenon of teacher stress, we can conclude that engineering and physiological models are insufficient, because no single factor personal or environmental can cause the stress in teachers. Teacher stress is negative response of pressures exerted by multiple factors. These factors may be organizational, physiological or behavioral. These pressures are mediated by cognitive appraisal of teachers.

When individuals are exposed to stressful stimuli, personality dispositions play a mediating role in the onset of stress reactions. Clearly, there are considerable individual differences in susceptibility to stress. It is also evident that stress reactions are not solely the results of external sources but are determined to a large extent by individuals' perceptions and interpretations of such stimuli, as well as their coping mechanisms.

Kyriacou and Sutcliff (1978) pointed out that stress reactions would vary among individuals, even when the objective external conditions are the same. They have defined teacher stress in terms of negative reactions resulting from the aspects of teachers' job and mediated by the perception of teacher. Brenner and Bartell (1984) built on a conceptual model of teacher stress proposed by Kyriacou and Sutcliff

(1978). They maintained that teacher stress results from the combined effects of the teacher and school characteristics, potential stressors in the school environment, actual stressors, overall perceived work related stressors, stress reactions/ symptoms and health status, personality characteristics and coping mechanisms, as well as non-work related (life events) stressors.

We can conclude that teacher stress is an interactional phenomenon. There is no single factor that may explain teacher stress. While defining this term, we have to concentrate all the aspects and dimensions of teacher i.e., individual and organizational.

Signs and Symptoms of Teacher Stress

Responses to stress can vary, both between individuals and over time. Some people may primarily experience physical symptoms whereas others may experience psychological disturbance (Education Commission Advisory Committee, 1992). Brown and Ralph (1992) listed most common signs of teacher stress as performance at work, relationships with colleagues and behavioral and emotional indicator. The signs related to first category *performance at work* are frequently feeling like staying off work, inability to manage time well, inability to meet dead lines, inability to concentrate, having a heavy workload, inability to delegate, feelings of inadequacy related to performance at work, job dissatisfaction, taking work home more frequently, low level of productivity.

The second category *Relationships with colleagues* comprised of increased feelings of irritation or aggression, becoming increasingly introverted, inability to relate to colleagues, unwillingness to cooperate, frequent irrational conflicts at work, cynical, inappropriate humor, de-motivation, withdrawing from supportive relationships, lying, role ambiguity, role conflict.

The signs of *behavioral and emotional indicator* are loss of appetite, reduced self esteem, increased used of alcohol, tranquilizers, coffee, cigarettes, etc., insomnia, bad dreams or nightmares, being unduly fussy, feelings of alienation, loss of confidence, too busy to relax, frequent colds, influenza or other infections, vague aches or pains, accident prone, persistent negative thoughts, and palpitations.

According to Kyriacou and Sutcliffe (1977) the symptoms of stress may be physical such as peptic, ulcers, cardiovascular diseases etc., psychological such as depression, anxiety etc., or behavioral such as deterioration in work performance and interpersonal relationships etc. Similarly, Dunham (1984) mentioned the two most frequently indicated stress responses emerged over and over again, subsequent studies. These were tension headaches and general irribility and bad temper. In a study Dunham (1984) interviewed English teachers and these responses were reported: disenchantment, exhaustion, unhappiness and comfort eating. Dunham (1984) has grouped stress reactions into four main categories: behavioral, mental, emotional and physical.

Kyriacou and Pratt (1985) described the most frequently mentioned symptoms in teachers as: being unable to relax or switch of after work; feeling very tense; being emotionally and emotionally drained at the end of the school day; and sleeplessness. Winkinson (1988) reported irribility, frustration, tension and anxiety as the main symptoms of stress at work among teachers. Simpson (1976) found that most frequently reported reactions to work-induced pressures were feelings of exhaustion, tension headaches, reduction of contacts with other people, outside school hours and disturbed sleep.

Sources of Teacher Stress

We all experience stress in our daily life, whatever the situation may be. Work is experienced stressful when individuals realize that they are having difficulty coping with the demands of work. The experience of stress is a result of an interaction between individuals' characteristics, their workplace environment and their perceptions. The circumstances that cause stress are called stressors. Stressors vary in severity and duration. Some events are stressful for everyone but in other situations, individuals may respond differently to the same event, what is a stressor for one person may not be stressful for another. Sources of stress may vary for every one but,

There are some individual sources within the person that leads to stress. These may be related to one's biological or psychological systems. There are many sources of stress within the family. Each member of a family has an impact on other family members. They affect each other with their specific behaviors, needs and personality traits. The factors within the family that leads to stress may be parents' conflicting relationship, separation of parents or death of one or both parents, family systems (joint or nuclear), poor interaction and communication, less social support etc.

Some factors are related to society that may affect a person directly or indirectly. Among these sources warlike situation, terrorism, immoral values, poor health conditions, corruption, unemployment, poor economic conditions etc. These may lead to stress. Sources of stress at workplace are related to jobs' demands, jobs' nature, and as well as, physical and psychological work environments. These sources can vary from individual to individual, organization to organization, and situation to situation. Frequently cited the causes of stress at workplace are organizational change, inadequate communications, too much work, time pressures, shifting work, lack of control, uncertainties, poor work environment, inadequate equipment, conflicting demands of

work and home, poor relationships with supervisor and colleagues, lack of support, role conflicts and role ambiguities etc.

Whatever the causes of stress at workplace may be, researchers agree that both the job and the person play a role in situations of work- related stress. So it is important to obtain an objective understanding of both the demands of the job and the vulnerability of the person.

The array of sources of work stress in teachers is highly diverse and ranges from very distal to the very proximal sources of stress extend from the most immediate contexts of people's lives to the outermost boundaries of societies and cultures. A stress touches on one end the microenvironments of individual's and on the other end, the large-scale social organization. These sources can be seen as including some of the central features of society itself, its values systems, the stratified ordering of its populations, the organization of its institutions and the rapidly and extent of changes in these elements.

Factors of stress can also be identified in the direct experiences of teachers. Eventful experiences involving undesirable, unscheduled or involuntary change, and continuing experiences, involving persistent problems within social rules, can be powerful conditions for stress. Factors within the person may be the cognitive style, appraisal of opposing motivational forces, state of conflict, degree of stress coping ability of individual and other demographic variables.

Studies dealing with stress in academic began in the early 1970's. They focused mainly on the identification of sources of stress common in the domain (Bender & Blackwell, 1982; Clagett, 1980; Clark, 1974; Crase, 1980;). According to Kyricou and Sutcliffe (1978), teacher's perception of threat is the key element among sources of stress. When demands made upon the teacher, he was unable to cope and failure to do so threatened his mental or physical well being. Cox (1978) believed that

when faced with any task, the person has two evaluations to make, which are the demands of the task and his own capability for fulfilling these demands. When these two assessments disagree a state of imbalance results, which is the underlying cause of stress response. When the task exceeds with the person's capability exceeds the demands, he is also under stress.

Brenner and Bartell (1984) built on the conceptual model of teacher stress proposed by Kyricou & Sutcliffe (1978). They maintain that teacher stress results from the combined effects of the teacher and school characteristics, potential stressors in the school environment, actual stressors, overall perceived work-related stressors, stress reactions/ symptoms and health status, personality characteristics and coping mechanisms as well as, non-work related (life events) stressors.

Eckert and Williams (1972) found that routine duties, long hours, poor facilities, friction among faculty members, and administrative red tape were the prevalent sources of stress. Hodge and Marker (1978) identified workplace related sources of stress as relationships with colleagues, administrative staff, clerical staff and students complex communication needs, inattentive students and lack of discipline in the students. Melendez and DeGuaman (1983) found that the three sources of stress of highest concern were faculty apathy, student apathy and overload.

Some studies have identified numerous sources of stress intrinsic to the task and role overload and associated demands on time (Bridges, 1992; Dewe, 1986; Manthei & Solman, 1988), disruptive pupils (Manthei et al., 1996), inadequate administrative support (Adair, Manthei, & Tuck, 1989), lack of social recognition of value of teaching as vocation (Galloway et al., 1982) and inadequate resources for teaching (Manthei & Solman, 1988).

A comprehensive survey by Borge, Riding, and Falzon (1991) suggested pupil misbehavior, time difficulties, and poor relationships as distinct dimensions of teacher

stress. Another study (Bolye et al., 1995) concluded that there are multiple sources of teacher stress and these sources are correlated. Workload and student misbehavior are the two major contributors to teacher stress. In another study, Tuck et al. (1999) reported that disruptive students, inadequate remuneration and task overload were sources of moderate stress in school teachers.

A number of causes seem to recur in most of the reported studies. These appear to fall into the following five major categories. *Pupil behaviors*: e.g., indiscipline, disobedience, misbehavior, poor motivation, and poor attitudes to work. *Work load and time pressure*: e.g., having too much work to do, meeting dead lines. *Working conditions*: e.g., poor or inadequate equipment/facilities, large classes. *Relationships with colleagues*: e.g., conflict with, and lack of support from colleagues and management. *School ethos:* e.g., lack of agreement on standards (Kyricou, 1997).

Otto (1982) using a wide range of schools and teachers has indicated stressors in the area of the work role such as workload, class size, administrative demands; role conflict and ambiguity such as conflicting demands by management, school-community conflict, teacher's role as counselor etc.; lack of recognition; poor physical environment and resources such as noise, geographic isolation; lack of control and decision making power such as bureaucratic structure; poor communication and the emotional demands of teaching such as its complexity, high quality teaching performance, dealing with students of different backgrounds, culture and gender.

Punch and Tuetteman (1990) found job-related stress factors that were related to stress as perceived lack of efficacy/achievement, inadequate access to facilities, lack of collegial support, excessive societal expectations, lack of influence, student misbehavior and lack of praise / recognition. Brown and Ralph (1992) reported the most common sources of teacher stress as structural change, classroom discipline, heavy workloads, lack of resources and poor school management.

Cooper and Kelly (1993) studied a wide range of educators from primary teachers to principals of higher education institutions and two main sources emerged as prediction of occupational stress and job dissatisfaction: 'work overload' and 'handling relationship' with staff. Moreover, several studies have focused on the association between teacher stress and personality factors (Pierce & Molloy, 1991; Borg, Riding, & Falzon, 1991).

All above mentioned studies explain the work stress sources in a number of factors present in the workplace. Some studies shows factors of stress related to organizational structure, some focus on nature of job and teacher's role, and other focus the interpersonal relationship of teachers as emerging the source of stress. From the review of literature (Cooper, 1980; Cox, 1978; Wanburg, 1984) generally, following sources of stress are found in teachers:

1. Intrinsic to the job
2. Role in the organization
3. Relationship at work
4. Career development
5. Organizational structure and climate
6. Work -Home interface
7. Cognitive vulnerability

1) Intrinsic to the Job

Research indicates that there is a set of unique factors for every job that employees identify as being sources of stress for them. Overall, there are number of major recurring themes, concerned with physical working conditions, shift working, work overload / underload, occupational level, repetition and boredom (Cooper, 1980).

A large number of teachers in our society today find themselves faced by circumstances, which they believe, force them to do their job badly (Esteve, 1989), poor physical working conditions (e.g., Wanburg, 1984). These poor conditions are largely reinforced by a lack of resources. Aspects of working conditions that have received attention in the past include such things as class sizes, unsuitable buildings, noise level and inadequate resources (e.g., Kyriacou & Sutcliffe, 1978). The significance of each of these factors does vary in importance depending on the specific circumstances of the schools themselves. Much research into teacher stress has revealed a general lack of resources as one of the most important factors (Laughlin, 1984), more specifically, inadequate school buildings and equipment and an unpleasant work environment (Fimian & Santro, 1983).

Inspite of physical working conditions, many studies have concluded that the particular characteristics of the job, as work overload and underload are related to the experience of work stress (Cooper & Payne, 1991). Another aspect of the teaching that can be seen directly related to work overload is the problem of having a wide range of pupil abilities in one class. This may require more lesson planning and more detailed and lengthy assessment (e.g., Dunham, 1984; Fimian & Santro, 1981).

Work overload is also heavily linked to time pressure not only in terms of the amount of work teachers have to fit in during the day, but also the amount that they have to take home at night, introducing into their personal life (e.g., Smith & Cline, 1980; Fimian & Santro, 1983).

Researches also suggested that the need to work long hours is a source of stress for teachers (Austin, 1981). Although many people outside of the profession believe that teachers have a short working day, in reality, many teachers, in particular those in senior managerial positions, work longer hours than expected.

2) Role in the organization

Research evidence suggests that structural factors such as role conflict (conflicting demands) and role ambiguity (lack of clarity about the task) can be potential causes of stress (Kahn et al., 1964). On a more general point, change may lead to stress as it can introduce conflict or ambiguity into what was originally a stable teaching role (Kelly, 1988). Dunham (1984) studied the stress imposed by the demands of specific managerial roles and found that tension was created by role conflict and role ambiguity.

Role ambiguity may exist in the work place when an employee does not have adequate information in order to carry out the task or does not fully understand the requirements. The outcomes of this can be job dissatisfaction, lack of self confidence, feeling of futility, lack of self esteem, depression, low motivation and the behavioral outcomes of increased intensions to leave the job. There are number of situations that may lead to role ambiguity and these are contemporary issues in teaching (i.e., job relocation, changes in the method of working, new organizational structure and changes in actual requirements of the job).

Role conflict may be seen to exist when an individual is torn between conflicting demands placed upon them by others in the organization (e.g., being required to do things that they do not perceive to be part of their job), or when conflict exist between their job and their personal beliefs. Therefore, stress may result from the inability to meet these various expectations or demands. The results of this conflict have been found to result in lower job satisfaction and higher job tension.

Another potential stressor is that of being inadequately prepared for the role of a teacher, i.e., by inadequate training (Fimian & Santro, 1983). With the amount of rapid changes that have taken place within teaching, it is very possible that a teacher training may well be out of date by the time he or she actually starts to teach. The teacher of

today has a very different role to that of a teacher starting a career ten years ago. These conflicting situations of role and overload of responsibility result in stress being experienced.

3) Relationships at work

Work should be designed to facilitate interaction between people. Being able to develop relationship is an important part of work for many people, although difficult relationship can be a source of stress and job dissatisfaction.

There has been considerable debate about whether the presence of social support at work can buffer the impact of a stressful work environment. The pressure of relationships at work can be both a source of stress and a source of support, though there is a great deal of inconsistency in the literature with regard to the effect of relationships with colleagues (Sloan, Cooper, & Payne, 1988). A review of literature reveals that, with regard to interpersonal relationships, the major aspects that may be deemed stressful are those concerned with: status incongruence, social density, abrasive personalities, leadership styles and group pressure (Quick & Quick, 1984).

Dunham (1984) found that teachers reported working relationships with colleagues as a source of stress. Brenner and Bartell (1984) argued that the dominant source of stress is the quality of interpersonal relationships, and that of good relationships are of great value when providing support, which may alleviate stress. The evidence, however, is mixed and the value of the support may depend on its nature. Some types of communication may serve to reinforce difficulties and problems rather than help to resolve them. Interpersonal demands and social pressures can in themselves be potent sources of stress.

Another stressors facing teachers is that of relationship with pupils. Pupil attitudes and behavior has been identified as causing teacher stress. There are many

different types and levels of misbehavior, ranging from low levels of pupil motivation to overt indiscipline and from minor examples of restlessness to serious physical attacks. Interpersonal demands of teacher student relationship can in themselves be potent sources of stress.

A great deal of overlap may be found between the stress related to relationships with management in schools and organizational structure and climate of the school itself. Research has shown that particular individuals in a working environment may cause undue stress to others, because they do not recognize the interpersonal feelings and sensibilities in social interaction (Sutherland & Cooper, 1991).

4) Career Development

The stressors in the area of career development have been identified as consisting of two major clusters. These are: lack of job security and status incongruence. Some of the common features of the working life are the fear of job loss and threat of redundancy, and these have been found to have links with several serious health problems and increased muscular and emotional complaints (Smith & Cline 1980), with job insecurity follows subsequent deterioration of the morale and motivation of a workforce, which may lead to a negative impact on their job performance, efficiency and commitment. Teaching has always been believed to be a very secured job, and yet increasingly this is not necessarily the case. The insecurity of teachers' jobs is well documented (Wanburg, 1984). McGrath (1976) has suggested that the concept of uncertainty represents a unifying theme in stress research that underpins many other variables. This uncertainty may be about the future, in terms of career development or simply about whether the job is secure or not.

Status incongruence i.e., under or over promotion and frustration at having ambitions thwarted and reaching a career ceiling, is a feature that is also relevant to the

section concerning relationships at work, and refers to the situation where the actual status bestowed on an individual does not match that individual's status expectations and beliefs. This is of particular relevance to teachers, as they complain they are suffering from a poor public image in terms of prestige, salary and respect for their professional status (Laughlin, 1984; Wanberg, 1984). Under-promotion has also been found to be related to stress in teachers (Fimian, 1983).

5) Organizational Structure and Climate

Another feature important in determining the levels of stress that teachers experience is the structure and climate of the school in which they work. Cooper and Marshal (1978) refer to the potential threat to autonomy, freedom and identity that this may impose. Worker well being will be affected by the way in which the organization treats its members. The culture and management style of an organization may be responsible for causing some of the sources of stress.

Studies of organizational climate (Guzley, 1992) have indicated that communication processes predict staff reactions to the job and employer. Organizational communication that focuses on negative attribution, cynicism, and self interest induce feelings of unsupportiveness and mistrust in the workers.

Organizational style and culture is transmitted through the behaviour of supervisors. Landy (1992) provides evidence that management behaviour and style have an impact on the well being of the workers.

The important element is not just how the organization treats its workers, but how the individuals perceive the actual culture, climate and customs that exist, and how they react to this in terms of their job satisfaction, commitment to the organization and other behavioral outcomes (e.g., absenteeism). Structural stressors include little opportunity for individual advancement, poor communication, an inadequate amount of

feedback about performance, inaccurate or ambiguous measurement criteria for performance and unfair control systems (Brief et al., 1980).

Other features that may be relevant to teachers at present are those concerning participation in decision-making, lack of effective consultation and communication and restrictions on behavior e.g.; lack of sanctions to deal with unruly pupils. Miller and Monge (1986) argued that effective involvement in decision-making could result in improved from conflict between organizational and family demands, financial difficulties, and conflicts between organizational and personal beliefs. Teachers have recently been expressing resentment at the lack of involvement in many of the changes that are taking place within education and, consequently their schools

6. The Work-Home Interface

So far the concentration was on the sources of stress in the teacher's working environment. There are, however, potential stressors that exist in the life of the teacher, outside the work arena and affecting behavior at work, which require consideration when assessing the sources and impact of teacher stress. These stressors include stressful life events; pressure resulting for example, one partner's job may require relocation etc. The interaction between home and work can create stress. Research (Pearlin and Turner, 1987) has revealed that family-based strains can result from four possible sources:

1. Role pressures or overload
2. Interpersonal conflicts between couples and between parents and children.
3. Role captivity where they are bound by one role, but would prefer another.
4. Restructuring of family roles through time.

One aspect of home life that may help exacerbate pressure is that of being part of a dual career couple. Lewis and Cooper (1989) outlined some of the stressors of

being a member of a dual career family as conflict caused by the traditional expectations concerning the roles of women and men, overload to cope with demands of work and family, and dilemmas of equality though they may attempt to maintain a sense of equality, problems may result when performance and positive psychological and behavioral reactions. Events occurring in the home may be both a source of stress and a source of support, just like relationships at work.

7. Cognitive Vulnerability

A substantial body of contemporary research has examined the cognitive factors affecting individual susceptibility to stress amongst teachers. Some studies have explored the role of self defeating beliefs and attributions in teacher stress (Bibou-Nakou et al., 1999; Chorney, 1998). Self-efficacy has also been researched as a cognitive vulnerability factor. Friedman (2000) examined the self-reports of newly qualified teachers and described his findings as the 'shattered dreams of idealistic performance' Respondents revealed sharp declines in self-efficacy as they found that they could not live up to their ideal performances. In another study Brouwers and Tomic (2000) used structural equation modeling to analyze the relationships between self-efficacy and burnout in 243 secondary school teachers. It emerged that self-efficacy had a synchronous effect on personal accomplishment and a longitudinal effect on depersonalization. However, low self-efficacy had a synchronous effect on emotional exhaustion. The direction of the causal relationship between self-efficacy and stress symptomatology is particularly significant as it suggests that cognitive interventions designed to improve self-efficacy may mediate the effects of stress.

The greatest volume of contemporary research concerning cognitive vulnerability to teacher stress relates specifically to individual differences in coping style. In one recent study, Griffith et al. (1999) questioned 780 primary and secondary

school teachers, aiming to assess the associations between stress, coping responses and social support. High levels of stress were associated with low social support and the use of disengagement and suppression of competing activities as coping strategies. Interestingly, stepwise multiple regression revealed that coping style not only mediated the effects of environmental stressors, but also influenced teachers' perceptions of their environment as stressful. This is significant as it suggests that some of the stressors associated with teaching may not be inherently stressful but act as stressors only in transaction with coping style. A different approach to assessing the relationship between coping strategies and teacher stress was employed by Admiraal et al. (2000), concerned with active vs. passive responses to disruptive behavior in the classroom. 27 student teachers gave a total of 300 responses to indicate their coping responses to everyday stressful classroom situations. A strong relationship emerged between a coping style involving active behavioral intervention and teacher satisfaction, and a weaker relationship with pupil time on task was also evident.

Fimian's Teacher Stress Model

In the present study we have followed Fimian's Teacher Stress Model (Fimian, 1984). This model explain the teacher stress in a ten factor theory, five factors explain the sources of work stress and five factors explain the manifestations of stress, these ten factors comprise stress in teachers. According to Fimian, the occupational stress experienced by teachers is actually a multiple factor construct, and these factors are significantly related to one another. In both the literature and common usage of the term "work stress" it is apparent that certain things cause stress and that this stress, when it does occur, becomes evident in terms of any number of physiological, behavioral and other types of "symptoms". It should thus be possible to identify one array of events

that act as sources of stress and another of events that act as manifestations of stress. Moreover, the teacher stress is related to a number of work, job, and organizational variables in terms of both predicted directions and magnitudes.

Teacher stress is related more to environmental events, and the teacher's perception of these events, than it is to personal or professional variables such as teacher gender, age education level, number of students, and numbers of years teaching. Fimian (1982) also explained that frequency with which stressful incidents occur and the strength of their occurrence varies from teacher to teacher. A multitude of factors including situational demands, appraisal to that situation etc., cause the stress.

The factors describe in teacher stress model (Fimian, 1984) are: Time Management, Work related stressors, Professional distress, Discipline and motivation, Professional investment, Emotional Manifestations, Fatigue manifestations, Cardiovascular manifestations, Gastronomical manifestations, Behavioral manifestations.

Time Management refers to the problems in managing time demands and difficulties faced by teacher to manage it. It has consistently been identified as a major source of stress in numerous studies. (e.g., Dewe, 1986; Laughlin, 1984). It refers to the general level of demands made on teachers within very short period of time and teachers find it difficult to manage. Work related Stressors refer to work overload and time pressures, e.g., too much work to do, fast pace of work, big class size etc. Indeed, the variety of demands made on a teacher in a typical school day, often with tight dead lines attached to them; make this aspect of teaching a major area of stress (Austin, 1981; Sutherland & Cooper, 1991)

Professional Distress is comprised of those sources related to some professional variables as lack of progress and promotion opportunities, inadequate

salary, lack of recognition etc. Many studies have explained poor working conditions in the sense of prestige, salary, and respect for their status and opportunities for progress (Eskridge, 1984; Laughlin, 1984; Wanberg, 1984). Discipline and Motivation has been the main sources of stress in emerged in many studies on sources of teacher stress. Pupil's attitudes towards school, teacher and studies, and their lack of motivation have been identified as major source of stress (e.g., Laughlin, 1984; Payne & Furnham, 1987). Indiscipline as a source of stress has also been discussed in many studies (e.g., Dunham, 1984; Galloway et al., 1982; Laslett & Smith, 1984).

The next factor, Professional Investment refers to lack of control over discions, lack of improvement opportunities etc. These sources of stress have also been discussed in many studies. Warr (1992) describes low job discretion as the most important single characteristics in terms of causing stress at work. Karasek (1979) hypothesized that high job demands were not necessarily harmful in themselves but when accompanied by low decision latitude would result in psychological strain. Based on this concept, Karasek and Theorell (1990) developed demand control theory of work stress.

According to teacher stress model (Fimian, 1984), stress in teachers has been found to have a variety of manifestations. These manifestations can be at emotional, physical and behavioral levels. These manifestations are: *Emotional Manifestations* i.e., feelings of insecurity vulnerable, unable to cope, depressed, anxious; *Fatigue manifestations* i.e., Sleeping more than usual, becoming fatigued in a very short time, Physical exhaustion, Physical weakness Procrastinating; *Cardiovascular manifestations* i.e., Increased blood pressure, heart pondering or racing, rapid and/or shallow breath; *Gastronomical manifestations* i.e., Stomach pain of extended duration, stomach cramps, stomach acid; *Behavioral manifestations* i.e., using over the counter drugs, using prescription drugs, using alcohol, calling in sick.

Many studies have been investigated the association between the various sources of occupational stress and the resulting manifestations of stress i.e., psychological, physiological and behavioral. The long-term effects of these stressors have also been documented (Cooper & Payne, 1988; Milstein & Golaszewski, 1985). Individuals, who are unable to cope effectively with environmental demands that they perceive to be threatening, soon begin to show distress through manifestations of stress. Fimian and Santro (1981) claim that emotional manifestations are often precursors for behavioral and physiological manifestations.

Job Performance

Individual performance is a core concept within work and organizational psychology. During the past 10 or 15 years, researchers have made progress in clarifying and extending the performance concept (Campbell, 1990). Moreover, advances have been made in specifying major predictors and processes associated with individual performance. With the ongoing changes that we are witnessing within organizations today, the performance concepts and performance requirements are undergoing changes as well (Ilgen & Pulakos, as cited in Cambell, 1990).

Despite the great relevance of individual performance and the widespread use of job performance as an outcome measure in empirical research, relatively little effort has been spent on clarifying the performance concept. Still, in 1990, Campbell described the literature on the structure and content of performance. However, during the past 10 to 15 years, one can witness an increasing interest in developing a definition of performance and specifying the performance concept. Campbell (1990) and Campbell, McCloy, and Oppler (1993) agree that when conceptualizing performance, one has to

differentiate between an action (i.e., behavioral) aspect and an outcome aspect of performance.

The behavioral aspect refers to what an individual does in the work situation. It encompasses behaviors such as assembling parts of a car engine, selling personal computers, teaching basic reading skills to elementary school children, or performing heart surgery. Not every behavior is subsumed under the performance concept, but only behavior, which are relevant for the organizational goals: "Performance is what the organization hires one to do, and do well" (Campbell, McCloy, & Opller, 1993). Thus, performance is not defined by the action itself but by judgmental and evaluative processes (Ilgen & Schneider, 1991; Motowidlo, Borman, & Schmit, as cited in Cambell, 1990). Moreover, only actions, which can be scaled, i.e., measured, are considered to constitute performance (Campbell, McCloy, & Oppler, 1993).

The outcome aspect refers to the consequence or result of the individual's behavior. The above described behaviors may result in outcomes such as numbers of engines assembled, pupils' reading proficiency, sales figures, or number of successful heart operations. In many situations, the behavioral and outcome aspects are related empirically, but they do not overlap completely. Outcome aspects of performance depend also on factors other than the individual's behavior. For example, imagine a teacher who delivers a perfect reading lesson (behavioral aspect of performance), but one or two of his pupils nevertheless do not improve their reading skills because of their intellectual deficits (outcome aspect of performance). Or imagine a sales employee in the telecommunication business that shows only mediocre performance in the direct interaction with potential clients (behavioral aspect of performance), but nevertheless achieves high sales figure for mobile phones (outcome aspect of performance) because of a general high demand for mobile phone equipment.

In practice, it might be difficult to describe the action aspect of performance without any reference to the outcome aspect. Because not any action but only actions relevant for organizational goals constitute performance, one needs criteria for evaluating the degree to which an individual's performance meets the organizational goals. It is difficult to imagine how to conceptualize such criteria without simultaneously considering the outcome aspect of performance at the same time. Thus, the emphasis on performance being an action does not really solve all the problems. Moreover, despite the general agreement that the behavioral and the outcome aspect of performance have to be differentiated, authors do not completely agree about which of these two aspects should be labeled 'performance'

Performance as a Multi-Dimensional Concept

Performance is a multi-dimensional concept. On the most basic level, Borman and Motowidlo (1993) distinguish between task and contextual performance. Task performance refers to an individual's proficiency with which he or she performs activities, which contribute to the organization's 'technical core'. This contribution can be both direct (e.g., in the case of production workers), and indirect (e.g., in the case of managers or staff personnel). Contextual performance refers to activities which do not contribute to the technical core but which support the organizational, social, and psychological environment in which organizational goals are pursued. Contextual performance includes not only behaviors such as helping coworkers or being a reliable member of the organization, but also making suggestions about how to improve work procedures.

Performance as a Dynamic Concept

Individual performance is not stable over time. Variability in an individual's performance over time reflects (1) learning processes and other long-term changes and

(2) temporary changes in performance. Individual performance changes as a result of learning. Studies showed that performance initially increases with increasing time spent in a specific job and later reaches a plateau (Avolio, Waldman, & McDaniel, as cited in Marsh, 1987). Moreover, the processes underlying performance change over time. During early phases of skill acquisition, performance relies largely on 'controlled processing', the availability of declarative knowledge and the optimal allocation of limited attentional resources, whereas later in the skill acquisition process, performance largely relies on automatic processing, procedural knowledge, and psychomotor abilities.

To identify the processes underlying changes of job performance, Murphy (1989) differentiated between a transition and a maintenance stage. The transition stage occurs when individuals are new in a job and when the tasks are novel. The maintenance stage occurs when the knowledge and skills needed to perform the job are learned and when task accomplishment becomes automatic. For performing during the transition phase, cognitive ability is highly relevant. During the maintenance stage, cognitive ability becomes less important and dispositional factors (motivation, interests, values) increase in relevance. Performance changes over time are not invariable across individuals. There is increasing empirical evidence that individuals differ with respect to patterns of intra-individual change (Hofmann, Jacobs, & Gerras; Ployhard & Hakel; Zickar & Slaughter, as cited in Casccio, 1995). These findings indicate that there is no uniform pattern of performance development over time.

Additionally, there is short-term variability in performance, which is due to changes in an individual's psycho-physiological state, including processing capacity across time. These changes may be caused by long working hours, disturbances of the circadian rhythm, or exposure to stress and may result in fatigue or in a decrease in activity. However, these states do not necessarily result in a performance decrease.

Individuals are, for example, able to compensate for fatigue, be it by switching to different strategies or by increasing effort (Hockey; Van der Linden, Sonnentag, & Frese & Sperandio, as cited in Casccio, 1995).

Perspectives on Job Performance

Researchers have adopted various perspectives for studying performance. On the most general level one can differentiate between three different perspectives: (1) an individual differences perspective which searches for individual characteristics (e.g., general mental ability, personality) as sources for variation in performance, (2) a situational perspective which focuses on situational aspects as facilitators and impediments for performance, and (3) a performance regulation perspective which describes the performance process. These perspectives are not mutually exclusive but approach the performance phenomenon from different angles, which complement one another.

Job performance, which refers to the degree to which an individual executes his or her roles with reference to certain specified standards set by the organization, is central to any organization (Nayyar, 1994). It is a complex phenomenon that depends on various factors. Hence it needs to be studied with a multidimensional approach. The field of practice in any profession is the range of different environments in which competency are expected. Standards are target skills and knowledge that we wish professionals to have before they are considered competent in a field.

There are two types of models concerning to define job performance. First, there are several efforts outlining general models of job performance and the determinants of job performance. Campbell, McCloy, and Oppler (1993) proposed the view of job performance as multidimensional in nature and comprised of eight factor

latent structure e.g., declarative knowledge, skill and motivation. Waldman and Spangler (1989) developed a model of job performance focusing on characteristics of the individual (e.g., experience, ability), outcomes (e.g., feedback, job security) and the immediate work environment.

The second category of the models defining job performance move toward more flexible definitions of work roles and jobs, they viewed jobs as dynamic and more interchangeable and are defined with less precision. The focus is on the personal competencies required to perform various work roles and jobs rather than a narrow review of specific tasks and duties inherent in fixed jobs and work roles (Cascio, 1995; Ilgen & Hollenbeck, 1991).

Empirical studies show that Heider's (1958) classic foursome, namely, ability, effort, luck and task difficulty are among the most frequently offered explanations of performance (Ravegad & Zilberman, as cited in Arvey, 1998), additional factors are also sometimes described as causes. Forsyth and Macmillan (1982) found that students attribute their examination results to good/faulty teaching, classroom atmosphere, etc. These findings clearly demonstrate that majority of causal factors have been attributed to teacher characteristics. In other words, the students attribute their success or failure as well as academic excellence to teaching quality.

Teachers Job Performance

The quality of educational process and its product is unquestionably influencing by teachers job performance. The entire edifice of education is shaky if the performance of teachers is weak and ineffective. Therefore effective job performance of teachers is a must for educational improvement, which we are striving hard to bring about. The definition of what constitutes best performance of teachers is of course

much more complicated than a simplistic listing of goals. It is much easier to list the rules of game than to coach someone to excel in performance. The mere creation and ratification of standards will never define good teaching at any level.

There are many factors, which contribute to a teacher's performance. A good teacher has to teach effectively in the class and to satisfy with his teaching style and teaching quality; moreover he has to manage time for teaching and other duties assigned by head teachers and department. He also has to manage class discipline, disruptive students, students' motivation and achievement levels. He has to be regular and punctual. He has to be good interaction with his students, their parents and his colleagues, because his interpersonal skills also determine his job performance, rather directly or indirectly. His attitude should be same for high grader student and low grader student. We can say that factors contributing to the good job performance of school teachers are many and diverse.

Although a universally agreed upon definition of teaching performance has not yet been attained, the concern for its formulation is strongly felt by educationists and policy makers. Within this context opinions of students are being recognized as most important in determination of teaching excellence (Abrami, Apollonia, & Cohen, 1990; Marsh, 1987; Perry, 1990).

In the 21st century, schools become very crucial to supporting the rapid developments of individuals and in local communities, societies, and international relations and are expected to perform a wide range of new structural, social, political, cultural and educational functions (Cheng, 1996). In this connection, teachers in the era of rapid change are often required to take up expanded roles and responsibilities, including curriculum developer, new teacher mentor, staff development facilitator, action researcher, pre-service teacher educator, team leader, decision maker, and member of management board, etc. (Boles & Troven, 1996; Murphy, 1995; Fessler &

Ungaretti, 1994). As such, teachers are inevitably in need of continuous life-long professional education to update themselves with new knowledge, competence, and attitudes to meet all these challenges.

It is commonly accepted that the teacher is the key element for the success of school education (Russell & Munby, 1992; Cooper & Conley, 1991; Carnegie Forum, 1986; Education Commission Advisory Committee, 1992). In the last two decades, policy-makers, teacher education institutions, and schools have implemented numerous initiatives in teacher education and development, aiming to improve teacher performance. Although huge amounts of resources have been invested into educational reforms, the performance of students as a whole has declined at a significant rate in Hong Kong as well as other developed countries. People are becoming aware of the limitations of the traditional efforts on improving teacher performance and educational quality in schools.

In order to understand the complex nature of teacher effectiveness and develop an approach to maximizing it, there is a great demand for research on teaching, teachers, teacher education and on the related personal, organizational, and contextual factors. Traditionally, concepts of teacher effectiveness focus mainly on individual teachers, particularly on instruction in a classroom context, and ignore the complexity of school organizational environment or the influence of the community that may affect the role and performance of teachers at individual, group, and organizational levels. Inevitably, there is a conceptual barrier adversely affecting any initiatives on teacher education and development to maximizing teacher effectiveness.

As discussed above, teachers have to perform a wide range of roles and responsibilities that may relate to teaching, school management, curriculum changes, educational innovations, teacher education, working with parents, and community services. All these suggest that the conception of research and policy initiatives on

teacher education and development should be broadened to cover a wide range of changing teacher roles in a complex context if we are to maximize teacher effectiveness. In other words, we need to pursue a new knowledge base for teacher education and development in the new century.

According to Medley (1982) and Cheng (1995), the structure of teacher effectiveness in the classroom is a comprehensive structure that integrates the teacher trait perspective, the teacher behavior perspective, and the process-product of teaching perspective to account for the relationships among teacher competence, teacher performance, student learning experience, and educational outcomes. Moreover, teacher effectiveness should be regarded not as a stable characteristic of the teacher as an individual but as a product of the interaction between certain teacher characteristics and other factors of which vary according to the situation in which the teacher performs.

Furthermore, the structure of teacher effectiveness should include the following important components (Medley, 1982; Cheng, 1995; Cheng & Tsui, 1996): *Pre-existing teacher characteristics* (i.e. the set of knowledge, abilities, and beliefs that a teacher possesses on entering into teacher education program); Teacher *competence* (i.e. the set of knowledge, abilities, and beliefs that a teacher possesses and brings to the actual teaching environment on completion of teacher education program); *Teacher performance* (i.e. the behavior of a teacher that may change differently when the teaching environment is changed); *Student learning experience* (i.e., the experience from interactions between teacher and students in the process of teaching and learning); *Student learning outcomes* (i.e., the progress that a student makes toward a defined educational goal); *External teacher education* (i.e., education or training provided by external teacher education institutions for building up teacher competence); *School organizational environment* (including school organizational structure, personnel management, culture, teaching facilities, resources, and school goal and mission, etc.);

Classroom environment (including existing class size and composition, pupil abilities, classroom climate, teacher-pupil relationship, etc.); *Curriculum* (i.e., the characteristics of planned teaching and learning content in the classroom); *Pre-existing student characteristics* (i.e. individual student's previous learning experience, physical and intellectual ability, learning styles, and other personal characteristics); *Teaching evaluation* (i.e. activities of monitoring and evaluating teaching performance and student's learning experience and outcomes); and *School-based teacher education/staff development* (i.e. training or staff development activities organized by the school with reference to the results of teaching evaluation or the needs of teachers in teaching).

As discussed at the beginning, teachers work not only in classrooms but also in a context of the school organization. Inevitably, there is an urgent need to understand the complex nature of school process and teacher effectiveness from broader perspectives and develop appropriate teacher education programs to help teachers become effective professionals in school organizations (Cheng, 1996). Current research (Cheng & Tsui, 1996, 1997, 1998) has documented that the concepts of total teacher effectiveness, multi-level self management, and multi-models of teacher effectiveness can be used to develop new strategies for conceptualizing teacher effectiveness research and teacher education programs in a school organizational context.

In order to enhance teacher effectiveness, it would also be necessary to find out what teacher characteristics -- in terms of personalities, attitudes, skills, and knowledge — are important to the achievement of assigned goals and tasks and why they are. The understanding of how teachers develop appropriate action plans with clear goals and tasks that are consistent with school mission and goals and how teachers gain the necessary attitudes, skills, and knowledge to implement their action plans and achieve their assigned goals and tasks is essential to establishing staff development programs for effectiveness.

Evaluation of Teachers Job Performance

All of us have been evaluated at one time or another, either at work or at home. Performance evaluation is a delicate issue. Performance evaluation is mostly used to meet the basic needs of any organization, to improve the work force and to provide certain administrative functions, to identify the strengths and weaknesses of individual employees and to develop and evaluate human resource systems (Cleveland, Murphy & Williams, as cited in Arvey, 1998). Performance evaluations are also used to reward past performance or justify salary increases and other monetary rewards (Hall, Posner, & Harder, 1989).

Swartz, White, Stuck, and Patterson (1990) derived from a synthesis of the process-product research on teaching, 28 teaching practices for rating the teachers' job performance. These practices can be grouped under five teaching functions: (a) Management of instructional time (b) Management of student behavior (c) instructional presentations (d) instructional monitoring, and (e) instructional feedback.

Ferris, Bergin, and Wayne (1988) measured teachers' job performance on seven performance dimensions. These were: a) Relations with students; b) Preparation and planning; c) Effectiveness in presenting subject matters; d) Relation with other staff; e) Self-improvement; f) Relations with parents and community; g) Poise.

In other studies conducting in Pakistan, Jahangir (1988) evaluates teachers' performance on a rating scale pertaining to the four broad categories of teaching behavior: intellect, personality, teaching techniques and interaction with students. Riaz (2000) determined four factors as the measure of teachers' performance (a) teaching competence demonstrated, (b) motivational skills (c) fairness in grading, and (d) teachers' attitude towards the students.

There are five main aspects involved in developing a system for the evaluation of teachers. The first is the purpose of the evaluation; the second is the target category of teachers to be assessed; the third is the conception of teachers' work that is adopted; the fourth concerns the dimensions of teaching quality about which judgments are to be made; and the fifth is the approach to establishing the validity of the assessments.

Purpose of Evaluation

Scriven (1967) drew attention to the distinction between formative and summative evaluation. If a school system institutes a system of assessment in order to encourage the professional growth and development of its teachers, it is engaged in formative evaluation. On the other hand, if the school system establishes an accountability system of evaluation in order to select teachers to license, hire, give tenure to, promote, demote or dismiss it is engaged in summative evaluation. Most commentators argue that the same procedures, and information gathered with them, can not be used for the two types of purposes — that teachers who may well benefit from assessment for formative reasons, will not expose their deficiencies if there is a risk that summative judgments might be made about them on the basis of information obtained for formative purposes (Darling-Hammond; Wise & Pease, 1983; Stiggins & Duke, 1990). Stiggins (1986) commented on the value of each of these two types of evaluation from the point of view of their contribution to overall school quality:

Accountability systems strive to affect school quality by protecting students from incompetent teachers. However, because nearly all teachers are at least minimally competent, the accountability system directly affects only a very few teachers who are not competent. Thus, if our goal is to improve general school quality - and we use only those strategies that affect a few teachers - overall school improvement is likely to be a very slow process.

Growth-oriented systems, on the other hand, have the potential of affecting all teachers - not just those few who are having problems. There is no question that all teachers can improve some dimension(s) of their performance. The survey of teacher evaluation that was conducted by Stiggins and Duke (1990) led them to suggest that there were several necessary conditions for the teacher growth model of teacher evaluation to succeed. The first was that any summative approach remains largely independent of the formative approach. Stiggins and Duke (1990) were not dismissive of summative evaluation. Rather they argued that highly developed accountability-based evaluation protects teachers' property and rights to due process and protects the public from incompetent teachers.

Category of Teachers to be Assessed

Issues and methods associated with teacher evaluation depend upon the stage of professional development attained by the teachers to be evaluated. Graduates of pre-service teacher education programs seeking certification would not fairly have the same standards applied to them, as would experienced teachers seeking promotion to senior teacher positions. Clearly, the assessment of pre-service teachers would need to consider separately from the assessment of novice, in-service teachers, who would need to be considered separately from experienced teachers seeking career awards, promotion or merit pay.

Stiggins and Duke (1990) suggested three, parallel evaluation systems. The first would be an induction system for novice teachers with a focus on meeting performance standards in order to achieve tenure, using clinical supervision, annual evaluation of performance standards and induction classes, with mentors and recognition of similarities in performance expectations for all. The second would be a remediation system for experienced teachers in need of remediation to correct deficiencies in

performance so that they might avoid dismissal. This would involve letters of reprimand, informal and formal, planned assistance by a remedial team and clinical supervision. The third would be a professional development system for competent, experienced teachers pursuing excellence in particular areas of teaching. These would be teachers pursuing continuing professional excellence. They would be involved in goal setting, receive clinical supervision, and would rely on a wide variety of sources, such as peers, supervisors, students and themselves for feedback, and would recheck their performance standards periodically. They would respond to the different demands for performance by different grade levels and subject areas.

Stiggins and Duke (1990) studied several cases of success in the pursuit of growth oriented evaluation and considered the most important policy decision to be the distinction between the three types of teacher clientele described above. They also concluded that such an approach necessitated teacher involvement in the development of teacher evaluation systems that the frequency of teacher evaluations varies across the three teacher groups, from annually for the first two groups to perhaps four yearly for the last. They suggested that departmental heads, peers, central authority supervisors, outside consultants, and students could make worthwhile contributions. They went on to prescribe training for both supervisors and teachers in a "vision" of good teaching, effective communication and interpersonal relations, in the gathering and analysis of data. Third, they recommended that the sources of data used in the evaluation be diverse, including classroom observation, student achievement data that are sensitive to particular priorities and that are used by teacher and supervisor together for the purpose of teacher growth, artifacts, such as lesson plans, student work books, and teacher reflections, journals and interview responses. Furthermore, the authors argued for "a culture conducive to growth". Stiggins and Duke went on to argue for teacher

involvement, mainly in order to build a climate of trust, and for the provision of adequate resources to support professional development.

Conceptions of teachers' work

Darling-Hammond, Wise, and Pease (1983) presented several conceptions of teachers' work. First, teachers' work might be conceived of as labour, whereby the teacher's task is to implement educational programs as required along with adherence to prescribed procedures and routines. Second, teaching might be seen as a craft, that is, an activity involving knowledge of specialized techniques and rules for applying them. Next, the work of the teacher might be viewed as that of a profession. In this view, a teacher would need to be able to master not only theoretical and technical knowledge, and specialized skills and techniques but also sound professional judgment about their application arising from a body of knowledge of theory. Fourth, teachers' work might be considered an art, and their artistry manifested in unpredictable, novel, and unconventional applications of techniques in personalized rather than standardized forms.

Darling-Hammond (1986) illustrated the relationship between concept of teachers' work and evaluation approaches by distinguishing between "bureaucratic" and "professional" concepts of teaching. She wrote that the bureaucratic conception of teaching implies that administrators and specialists plan curriculum, and teachers implement a curriculum planned for them. Teachers' work is supervised by superiors, whose job is to make sure that teachers implement the curriculum and procedures of the school district. In the pure bureaucratic conception, teachers do not plan or inspect their work; they merely perform it.

In a more professional conception of teaching, teachers plan, conduct, and evaluate their work both individually and collectively. Teachers analyze the needs of

their students, assess the resources available, take the school district's goals into account, and decide on their instructional strategies ... Evaluation of teaching is conducted largely to ensure that proper standards of practice are being employed.

Haertel (1991) claimed that the professional model should involve assessment based on control methods similar to those used in established professions like law and medicine, involving more rigorous entrance requirements, professional practice boards, altered school administration to allow teachers greater scope for planning and decision making, professional development roles for professional associations, and new forms of assessment. On a more sceptical note, however, Scriven (1996) referred to the "professional orientation" as "the politically correct approach" (p. 444).

Dimensions of Teaching Quality

Other important conceptual distinctions concern three aspects or dimensions of teacher quality that are commonly used in making judgments about the quality of work performed by teachers. Medley (1982) and Medley and Shannon (1994) distinguished between teacher effectiveness, teacher competence and teacher performance. Teacher effectiveness is a matter of the degree to which a teacher achieves desired effects upon students. Teacher performance is the way in which a teacher behaves in the process of teaching, while teacher competence is the extent to which the teacher possesses the knowledge and skills (competencies) defined as necessary or desirable qualifications to teach. These dimensions are important because they influence the types of evidence that are gathered in order for judgments about teachers to be made.

As Medley and Shannon (1994) pointed out, the main tools used in assessing teachers' competence are paper-and-pencil tests of knowledge, the main tools for assessing teachers' performance are observational schedules and rating scales, and the main tools for assessing teachers' effectiveness involve collecting "data about the

teacher's influence on the progress a specified kind of student makes toward a defined educational goal" (p.6020) and are most likely to be student achievement tests.

Establishing the validity of assessment

This issue concerns the debate about epistemologies that has featured in research on teaching over the last two decades. Moss (1994) distinguished between "psychometric" or "traditional" and "hermeneutic" approaches, with particular reference to "performance assessment". In a psychometric approach to assessment judges score independently each performance without any extra knowledge about the teacher or the judgments of other judges. Scores awarded to each separate component are aggregated and the composite score is the basis for inferences about competence. with reference to relevant criteria or norms. In a hermeneutic approach, judges have contextual knowledge on the basis of which they ground their interpretations, and make integrative interpretations about the collected set of performances, rather than on each component separately. Rational debate among judges occurs, multiple sources of evidence are used, and judgments are revised as a part of collaborative inquiry. Moss (1994) explained the issues as regardless of whether one is using a hermeneutic or psychometric approach to drawing and evaluating interpretations and decisions, the activity involves inference from observable parts to an unobservable whole that is implicit in the purpose and intent of the assessment. The question is whether those generalizations are best made by limiting human judgment to single performances, the results of which are then aggregated and compared with performance standards (the psychometric approach), or by expanding the role of human judgment to develop integrative interpretations based on all the relevant evidence (the hermeneutic approach).

Students' Evaluation of Teachers Performance

Evaluation is as much a part of education as is learning. A variety of people, techniques, and instruments are used to conduct performance evaluations. The usual evaluator is a teachers' supervisor, colleagues, pupils, subordinates and self-evaluations are used as well. Some inaccuracy in teacher's evaluation is due to personal and interpersonal factors. Researches have shown that ratings can be influenced by the gender and the race, personality traits of the rater and the ratee (Robbins & DeNisi, 1994).

The term 'student's evaluation of teacher's performance' was first introduced in the ERIC system in 1976; between 1976 and 1984 there were 1055 published and unpublished studies under this heading and approximately half of those have appeared since 1980. Remmers (1928) initiated the first systematic research program in this field and might be noted as the father of research into student's evaluation of teaching effectiveness. Remmers (1949) was the first to recognize that the reliability of student ratings should be based on agreement among different students of the same teacher, and that the reliability of the class- average response varies with the number of students in a way that is analogous to the relation between test length (i.e., number of items) and test reliability in the Spearman-Brown equation

Recently there has been strong interest in the student evaluation of teaching (SET) Literature. The numbers of researches have focused on validity concerns with SETs (Greenwald, 1997), the multidimensionality of teaching (Marsh & Roche, 1999), the structure of student ratings of instructional effectiveness (d'Apollonia & Abrami, 1997), and the effect of grading leniency on SETs (Greenwald & Gilmore, 1997; McKeachie, 1997). Particularly in the last 15 years, the study of student's evaluation has been one of the most frequently emphasized areas in American educational

research. Thousands of papers have been written and reviewed (Aleamoni; Braskamp; Centra; Cohen; Costin; Doyle; Feldman; Kulik & Mckeachie; Murray; Remmers & Wolf, as cited in Marsh, 1984).

According to Feldman as cited in Scriven (1995) there have been over 2,000 articles published on student ratings—well over 1,000 of which present research evidence. In fact, there is more good research on student ratings than on any other aspect of higher education. A number of studies and writings have been done on the effect of certain environmental factors on the utility of student evaluations. Giordano (1998) argues that student evaluations are currently used for administrative personnel decisions rather than improvement of instruction.

According to the North Carolina (NC) State University Handbook for Advising and Teaching (1994), student evaluation of teacher effectiveness serves two purposes. Most importantly, student evaluations provide instructors with important feedback from the consumer's point-of-view. Students can and do make important contributions to the teaching-learning process, and teachers must be receptive to their ideas. Additionally, student evaluations are of value to administrators and department chairs in assessing perceived effectiveness of instruction.

Students are in a unique position to assess a variety of aspects concerning effective instruction. Scriven (1995) identified several sources of validity for student ratings of instruction that include the students' ratings of their own increased knowledge and comprehension, the perceived changes in motivation toward the subject taught, a career associated with the subject, and the further learning in that subject area. Students get the opportunity to observe teacher behavior relevant to competent teaching, such as punctuality. This is also identification of teaching style indicators, such as enthusiasm. May also be able to give the feedback about the information that is not relevant to

competent teaching, but important to other students, such as textbook cost, attendance policy, or homework.

Ratings of overall teaching effectiveness are moderately correlated with independent measures of student learning and achievement. Students of highly rated teachers achieve higher final exam scores, can better apply course material, and are more inclined to pursue the subject subsequently (Abrami, Apollonia, & Cohen, 1990; Braskamp, Brandenburg, & Ory; Cohen; McMillan & Forsyth, as cited in Marsh & Dunkin, 1992).

Despite the research that supports the validity of student evaluations, many individuals express reservations about their use in faculty performance appraisal systems (Adams; Goldman; as cited in Tata, 1999). A common concern is the possibility that factors other than teaching effectiveness influence the evaluation scores. These include the procedures used to administer the evaluations (Seldin, 1993), the anonymity of the evaluators (Blunt, 1991), whether the course is required or elective (Scherr, & Scierr, 1990), the class meeting time (Centra, 1993;), whether or not the course requires quantitative reasoning (Cashin, 1990; Ramsden, 1991), the course workload (Marsh & Dunkin, 1992), the personal characteristics of the instructor (Radmacher & Martin, 2001), and the students' prior interest in the course subject area (Prave & Baril, 1993).

While individual situations and personalities may be able to lend some credibility to the description of student evaluations as unreliable, invalid, and useless, the literature does not support these claims. For over thirty years, exhaustive research has been compiled on student evaluations, and it has seen that when questionnaires are appropriately developed and administered, they remain useful tools in impacting the teaching-learning process on the higher education front.

Self Efficacy

The role of self-referent thought in psychosocial functioning has often been neglected in psychological research. The construct of self-efficacy has a relatively brief history that began with Bandura's (1977) publication "self-efficacy: toward a unifying theory of behavioral change". Prior to the work of Bandura, much psychological theories and research have focused on issues concerning acquisition of knowledge in performance of response patterns. Bandura (1977) defined efficacy as an individual's belief that he or she can successfully execute the behaviors required by a particular situation. Bandura (1986) further elaborated that self efficacy is the belief we hold about our own ability to perform a task or accomplish a goal. What people think, believe and feel affects how they behave.

The social cognitive theory (Bandura, 1986) is the overarching theoretical framework of the self efficacy construct. Within this perspective, self efficacy is viewed as one of the personal processes that interact reciprocal fashion with behavioral processes and environmental events. According to this theory, individuals posses a self system that enables them to exercise a measure of control over their thoughts, feelings, motivation and actions. This self system provides reference mechanisms and a set of sub functions for perceiving, regulating and evaluating behavior, which results from the interplay between the system and environmental sources of influence.

Perceptions of one's own efficacy importantly guide and direct one's behavior. According to Bandura (1986) the way people perceive themselves can affect the way they behave. He considered that individuals possess a self system that enables them to exercise a measure of control over their thoughts, feelings and actions. This self system houses one's cognitive and effective structure and includes the ability symbolize, learn from others, plan alternative strategies, regulate one's own behavior

and engage in self reflection. It also plays a prominent role in providing reference mechanisms and a set of sub functions for perceiving, regulating and evaluating behavior, which results from the interplay between the system and external environmental sources of influence and through self reflection individuals evaluate their own experiences and thought process.

The tenets of self efficacy have since been tested in varied disciplines and settings and have received support from a growing body of findings from diverse fields (Maddux & Stanley, 1986; Multon, Brown, & Lent, 1991). Self efficacy is therefore a relatively new construct in academic research (Multon, Brown, & Lent, 1991; Schunk, 1991). During the last decade, self efficacy beliefs have received increasing attention in educational research (Pintrich & Schunk, 1996), and teacher efficacy has emerged as a worthy variable. The idea that teachers' self beliefs are determinants of teaching behavior is a simple, yet powerful idea. Consistent with the general formulation of self efficacy, the concept of teacher efficacy has been identified in different ways depending on the quality of the research.

The role of self-efficacy in teaching and learning continues to interest researchers and practitioners alike. Self-efficacy (Bandura, 1977) has proved to be a powerful force in learning and motivation. Teacher efficacy—teachers' confidence in their ability to promote students' learning--was identified almost 25 years ago as one of the few teacher characteristics related to student achievement in a study by the RAND corporation (Armor et al., as cited in Hoy & Woolfolk, 2000). Since that early study, teacher efficacy has been associated with such significant variables as student motivation, teachers' adoption of innovations, superintendents' ratings of teachers' competence, teachers' classroom management strategies, time spent teaching certain subjects, and teachers' referrals of students to special education. Student self-efficacy plays a key role in classroom learning and is more significant than general self-concept

or self-esteem in predicting achievement. Yet much remains to be learned about this important aspect of efficacy and how it develops in teachers.

Historically, the Bandura (1977) and Rotters (1983) traditions have influenced the study of teacher efficacy. Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998) provided a comprehensive review of these historicals developments. Educational psychologist have termed it as "teacher self -efficacy" and defined as belief in one's ability as teacher to perform actions that influence conditions leading to student learning. Ashton, Webb and Doda (1983) defined teacher efficacy in the direction of outcome expectations and efficacy expectations, depending on Bandura's social learning theory. Bandura stated that motivation of a person is judged with his or her capacity while performing the actions (outcome expectations). In other words, the basis of motivation is represented with a person's level of judgments of the relationship between action and outcome. Teachers' beliefs and nature thereof influence their self concept as a teacher.

Ashton (1985) defined teacher self efficacy as the extent to which the teacher believes he or she has the capacity to effect student performance. He also defined as teacher's sense of efficacy is their belief in their ability to have a positive effect on student learning. Tschannen-Moran and Woolfolk-Hoy, Hoy (2000) defined teacher efficacy as a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated.

The construct of teacher self efficacy comprises of two independent dimensions: *self efficacy expectations*—a belief that one has the skill and ability to complete a future action, and *outcome expectations*—a belief that influence of external conditions including those of the family back ground, IQ level, and schooling etc. In the educational research literature these two factors have been named *Personal*

Efficacy (PE), and *Teaching Efficacy (TE)* respectively (Ashton & Webb, 1982; Gibson & Dembo, 1984). In this two facet model of teacher self efficacy, personal efficacy refers to a belief that he or she is capable of bringing about some educational out-come, Teaching efficacy refers to a belief that teacher population is able to bring about a change in student behavior despite out of school constraints. The basis of personal efficacy is represented with the teacher's perceiving himself positively in respect of professional dimensions, and the basis of teaching efficacy is represented with teacher's perceptions and the effects of external factors (Gibson & Dembo, 1984). Both, the confidence one has that his or her behavior will lead to outcome, together with the, confidence in one's ability to perform the behavior determines teacher action and efficacy.

Several notions relevant to teaching and education including efficacy beliefs, nature of teacher's personal theories and conception of intelligence, their work orientation, concept of school characteristics etc., and whatever sense teacher make of their world of work can all be termed as teacher's belief and attitude's system. Teacher education largely aims at formation of desirable beliefs for teacher empowerment and affectivity.

Bandura (1997) purposed that there are four general sources of efficacy building information: verbal persuasion, vicarious experiences, physiological arousal, and mastery experiences. Individuals create and develop self efficacy beliefs as a result of *verbal persuasion* they receive from others. These persuasions can involve verbal judgments that others provide. Verbal persuasion is widely used to ensure people that they possess those capabilities that enable them to get what they want. Individuals also form their self efficacy beliefs through *vicarious experiences* of observing others perform tasks. The effects of vicarious experiences depend upon observers' perception of the similarity between him and the model, the number and variety of the models,

perceived power of the model, and the similarities between the problems faced by the model and the observer. People also depend partly upon information they receive from their *physiological arousal* in the judgment of their capabilities. Emotional states such as anxiety, stress, arousal, and mood states exert its influence on self efficacy expectancies when people relate aversive emotional states with poor behavioral performance, perceived incompetence, or perceived failure. People are more likely to expect success when they are not be set by their emotional arousal than if they are tense and viscerally agitated.

The most influential source of self efficacy beliefs is the interpreted result of one's previous performance, or *mastery experience.* Success raise perceived self efficacy, repeated failures lower it, especially if the mishaps occur in early course of events. After the formation of efficacy expectations, through repeated success, the negative impact of occasional failures is likely to be reduced. Of course these, mastery experiences are likely the most powerful influence in fostering efficacy, but many factors influence how such information is cognitively processed and affects an individual's self appraisal.

Prior conceptualizations of teacher efficacy have ignored these sources of information and their relationship to efficacy and ultimate behavior. Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998) employed these sources of information in their theoretical model of teacher efficacy. Mastery experiences are considered the most powerful influence on efficacy as they provide direct feedback regarding capabilities. However, because the feedback must be processed and weighed through self referent thought, all successes do not lead to bolster efficacy. Attributional analysis and causal assumptions concerning outcomes impact the interpretation of mastery experiences. Furthermore, some outcomes may be valued more than others. Social cognitive theory emphasizes that vicarious experiences can impact learning and efficacy. Social

persuasion and the emotional state that one experiences during social interactions can also bolster, or weaken, self efficacy beliefs of teachers.

The correlates of teacher efficacy are many when using a variety of efficacy scales and measurements. Students of efficacious teachers generally have outperformed students in other classes. Teacher efficacy is also related to students' own self efficacy (Anderson et al., 1999), and motivation (Midgley, Feldlaufer, & Eccles, 1989). Regarding teacher behaviors, efficacious teachers persist with struggling students and criticize less after incorrect students' answer (Gibson & Dembo, 1984). Teachers with high efficacy tends to experiment with method of instruction seek improved teaching methods, and experiment with instructional material (Guskey, 1988).

An understanding of teacher's beliefs is therefore an important area in teacher education. Teacher's belief system is evolved through their concept of life and society in general, and the role of education regarding these. Teachers' beliefs are specifically related to their socialization, their own schooling, their teaching experiences and their home environment. Teacher's beliefs and attitudes drive their classroom actions (Richardson, Burke, & Leiter, 1996). Literature on teachers' beliefs reveals that teachers' belief s reflect their way of thinking and classroom practices (Elliott, 1989; Hollingsworth, 1989; Sparks, 1988).

Self Efficacy Beliefs and Human Functioning

Self efficacy beliefs influence how people feel, think, motivate themselves that foster stress, depression and a narrow vision of how best to solve a problem. High self efficacy, on the other hand, helps to create feelings of serenirity in approaching difficult tasks and activities (Bandura, 1993).

According to Schwarzer (1999) self efficacy can make a difference to people's ways of thinking feeling and acting. With respect to feelings, a low sense of self efficacy is associated with stress, depression, anxiety and helplessness. People with low self efficacy also harbour pessimistic thoughts about their performance and personal development. In contrast, a strong sense of belief in oneself facilitates cognitive and executive processes in multiple contexts, influencing, for example, decision making, job performance and academic achievement. (Bandura, 1995; Schwarzer, 1999).

Pajare (1996) observed that people engage in tasks in which they feel competent and confident and avoid those in which they do not. Most courses of behavior are initiated shape in thought. People's beliefs about their personal efficacy affect their thought processes in goal setting and planning when facing a task. People's belief in their efficacy influences the types of anticipatory scenarios they construct and rehears in their minds. For example, Bandura (1993) said, "those who have a high sense of efficacy visualize success scenarios they provide positive guide and support for performance. Those who doubt their efficacy visualize failure scenarios and dwell on the many things that can go wrong".

Research shows that self efficacy beliefs play a central role in the self regulation of motivation (Schun, 1984, 1989). As Bandura (1993) noted, most human motivation is cognitively generated. People motivate themselves and guide their actions through the exercise of forethought. They form beliefs about what they can do, they anticipate likely outcome of prospective actions, set goals and planed courses of action design to realize what they want to accomplish. Peoples' belief about what they can do therefore motivates them to work at completing task. Conversely, their beliefs about failure give them no motivation to work at a task.

Self efficacy beliefs also help determine what challenges people will undertake, how much effort they will expend in the endeavor, and how long they will persevere in the face of obstacles and failures (Pajare, 1996), the higher the sense of self efficacy. greater the effort, persistence, and resilience. It is common findings that people with self-efficacy persists in difficult assignments and do not put off easily (Guskey, 1988; Woolfolk, Rosoff, & Hoy, 1990).

Bandura, (1993, 1997) noted that efficacy beliefs also influence the amount of stress and anxiety individual experience as they engage in a task, and ultimately the level accomplishment they realize. People whom believe they can exercise control over the threats do not conjure up disturbing thought patterns. But people who believe they can not manage threat experience high anxiety arousal and dwell on their coping deficiencies. Pajare (1996) observe that a strong sense of efficacy enhances human accomplishment and personal well being in complex ways. People with a strong sense of personal competence approach difficult tasks as challenges to be master rather then as threats to be avoided.

We have seen that psychological strain and work stress occur when there is an imbalance between resources and demands. Demands can be internal as well as external. Although there are many kinds of specific demands directed as human service workers (e.g., teachers) the general one which seems of great psychological significance in the development of stress and burnout is the demand for competent, effective performance (Cherniss, 1980).

The typical staff members in teaching and other human service profession strive to achieve a sense of efficacy in their work. If this goal is blocked, the person's self esteem is threatened and the self response is strong. Thus any factor that thwarts a teacher's effort to perform effectively or to feel effective will be a major source of job

stress. There is reason to believe that the quest for competence and efficacy is especially critical for those engaged in teaching.

In one study, it was found that experiencing a sense of accomplishment in their work was the single most important contributor to their job satisfaction (Cherniss & Egnatios, 1978). If they felt that they were effective, all other annoyances and dissatisfactions tended to seem relatively unimportant. Lorti (1973) noted that teacher satisfaction is closely tied to achieving results with students" and feeling that one has influenced students". Thus empirical research suggests that achieving a sense of efficacy is perhaps the strongest job related goal and when this goal is affected by stressful conditions the self efficacy becomes lower and ultimately poor job performance and job dissatisfaction are the results.

Relationship of Teacher Stress, Job Performance and Self Efficacy

The experience of work stress can alter the way the person feels, thinks, and behaves, and can also produced changes in their psychological, physiological and behavioral functions. Many of these changes simply represent, in themselves, a modest dysfunction and possibly some associated discomfort. Many are easily reversible although still damaging to the quality of life at the time. Work stress in teachers also produces many negative effects. Some times these effects are on physical health and some times psychological health.

For several years it was hypothesized that stress serves to arouse a person and increase attention to the job, thus improving performance. But this trend is now changing, because beyond that optimum level of stress, performance falls off (Ivancevich & Matteson, 1980).

interpersonal relations are also impaired by the experience of work stress. Stress related impairment by of social relations might both create secondary problems and reduce the availability of social support.

Role of Self Efficacy as Moderator

The majority of occupational stress models propose that stressors in the occupational environment generate negative changes in the individual, in physical, psychological and behavioral terms (Beehr, 1995). These models also suggest that the relationship between stressors and their negative consequences is moderated by different factors such as demographic characteristics, personality features, social environment, etc. Research on occupational stress has tried to show these moderating relationships, highlighting the need to study more personal variables as potential moderators in the stress and its consequences relationships (De Rijk et al., 1998; Jex & Bliese, 1999)

Bandura, s (1966, 1986) definition of self efficacy executes this concept as one's belief of being able to cope with specific tasks and situational demands. Based on experimental studies (Adams & Beyer, 1977; Bandura & Adams, 1977; Bandura et al., 1980; Bandura et al., 1985), Bandura (1986) postulated that self efficacy operates as a cognitive mechanism through which perceived controllability reduces stress reactions. Self efficacy has been studied as a moderator variable in work settings with reference to different relationship i.e., moderator of the relationship between stress and strain (Matsui & Lo Onglatco, 1997), career self efficacy in relation to stress and career adjustment (Lent & Hackett, 1987). Jex and Bliese (1999) point out that self efficacy moderates the relationship between certain stressors, such as number hours worked, work overload or task meaning and, some of their consequences.

One's beliefs about oneself can act as moderating variables in the stress process. These beliefs have been considered in other areas within organizational psychology, showing for example the moderating effects of self esteem on the results of team work (Brief & Aldag, 1998). Other reports have supported the idea that stressors have a less negative effect when individuals have more positive self perceptions (Mossholder, Bedien, & Armenakis. 1982).

According to Bandura (1997), perceived self efficacy refers to beliefs in one's own capacity to organize and execute the courses of action required to manage prospective situations. Research shows that one's own beliefs of efficacy as an important determinant of motivation, affect, thought and action (Bandura, 1992).

Rationale of the Study

Teacher stress has been a topic of significant research for the last two decades, reflecting the detrimental effects of stress on employees. The costs associated with the stressful teaching occupation can be high in physical, economical, and academic terms. Numerous studies address the causes and effects of stress in teachers. The review of previous relevant literature has suggested that teacher stress has become number one health problem of school teachers (Borg, 1990; Borg & Falzon, 1993; Fontana & Abouserie, 1993, Travers & Cooper, 1996).

This problem becomes more severe in a country like Pakistan where teachers are suffering great problems on social, emotional and economic accounts. Teaching is considered as one of the stressful professions due to a number of the reasons including their pay structure, general status, working conditions, workload, school environment etc. (Naheed, Rehman, & Shah, 2000). The social status of teachers is not very prestigious. They have little scope for achieving recognition and professional advancement. The school system is also not uniform all over the country. The differences are so great that on one side there are numerous shelterless schools and on the other hand wall to wall carpeted and air conditioned classrooms. These schools are different not at the level of physical environment only but differences can also be seen at the level of curriculum, medium of instruction, teaching methods, examination system, number of students in one class etc.

All these circumstances are very stressful for teachers. In this era when the problem of teacher stress has been recognized even in civilized and developed countries. It is the need of the time to identify dimensions of this serious problem in our country, where teachers are considered as deprived community and where teachers have lots of factors at their schools and jobs that are contributing to their experience of stress.

The focus of present research is only on women school teachers. Women teachers, particularly in Pakistani society, face additional difficulties those are linked to the low status of women. In Pakistan, the largest concentration of working women is in the teaching profession. Yet, according to Economic Survey, Government of Pakistan (2002 – 2003) compared to men teachers, the ratio of women teachers is low in the public sector of education i.e., 36.5% of all teachers are women. This ratio corresponds to the fact that there is almost similar proportion (31%) of girls' schools in the country. The problems of women teachers are far more than their counterparts i.e., men teachers. Some of these problems are social e.g., social conservatism, rigid and oppressive cultural traditions etc., that may restrict the functioning of the women teachers and some of the problems are related to the job environments e.g., school locations, transportation, long distance traveling, and accommodation and security problems for single women etc. All these problems may lead to occupational stress.

There is a bulk of literature debating on gender differences among the levels of work stress. Few studies show that there is no gender difference among men and women on their experience of stressful circumstances at work environment (Lowe and Northcott, as cited in NIOSH, 2003), but a lot of researches has shown that women experience higher job stress and are more likely than men to bring job stress at home (Sharma, 2001; NIOSH, 2003). Research shows that women's stress in the workplace is related more to lack of balance and demands of home and work combined (Wrigh, 2002). There are many well documented reasons to expect that more women workers over than men workers suffer more from negative aspects of work-family spillover (Becker and Moen; & Voydanoff, as cited in Wrigh, 2002).

Women in our society are certainly not enjoying their position. Working women has to face many crises. It has been seen that majority of working women in our society are attached to teaching. Generally it is considered that teachings is

comparatively smooth and relax job for women, but practically this is not true. Teaching has ever been accorded autonomy of full professional status. It has an appropriate responsibility in fostering the development of young. It is very important due to its responsibility because child development and well being are taken as central concerns. Women teachers tried their best to perform their duties at job and home as well. They tried to fulfill expectations of family members and at the same time they are expected to be active member at schools.

The role of the teacher has considerable significance at all levels of education i.e., primary, secondary and higher. In a school, at the primary level the teacher's role is concerned with the socialization processes, which is followed at a later stage by the fundamental skills of literacy and numeracy. At the secondary level, the focus shifts towards instructions and the assessment of performance, which assumes even greater significance. The teachers' role at all levels is important. This role however is constrained by a number of matters, reasons and problems. The school teacher has to face many pressures at personal and work related levels. These pressures may exert stress among teachers. The teachers under stress may not fulfill their duties and responsibilities according to the demands. The stress in teachers may effect their performance at job and their beliefs about themselves. So the need was felt to conduct a research on the phenomenon of teacher stress.

The focus of present study is only on secondary school teachers. The assumption that secondary school teachers experience more stress is based on general observations and empirical studies. Many studies have concluded that secondary school teachers are highly stressful as compared to primary school teachers (Borg, Riding, & Falzon, 1991; Pervez & Hanif, 2003). In our education system, secondary classes have importance in a sense that after the completion of this class youngsters get choice for a career. Secondary school certificate is considered as the backbone of future career. So

the teachers have great pressures as compared to primary school teaching. In a recent study, Pervez and Hanif (2003) compared primary and secondary school teachers on levels and sources of stress. The results indicated that secondary school teachers experience more stress as compare to primary school teachers. The differences were also found among government and private school teachers. Government school teachers showed more stress. Imam (1990) concluded that secondary school teachers are dissatisfied with their jobs due to workload and relationship with students, colleagues and supervisors. It is revealed in literature that job dissatisfaction may lead to stress and burnout, and affects the overall performance of individuals and organizations. Dua (1994) found that 82 % of academic staff experienced job stress and this was strongly associated with job dissatisfaction and work load.

There are some researches in Pakistan that has been conducted to find out the relationship of occupational stress with job satisfaction, locus of control, peer or supervisory supports, psychological well being and attitudes of teachers toward their profession (Imam, 1990 ; Naheed, Rehman, & Shah, 2000; Haq & Sheikh, 1993). These studies are not specifically measuring phenomenon of teacher stress with the help of some specific measure for teacher stress. So it was realized that we should find out levels and sources of stress by using the scale that is particularly designed for the school environments. To clarify the larger picture of teacher stress Teacher Stress Inventory, TSI by Fimian (1984) was adapted and in combination with other instruments, was used in the present study. To obtain the objectives the present research is an attempt to find out the relationship of teacher stress, job performance and self efficacy. Literature review reveals that stress affects the performance level of individuals (Jamal, 1984). Stressful environment at workplace can led to increased emotional and physical disabilities among teachers, that may impact negatively to their job performance (Chance, 1992). Another important variable related to teacher stress is self efficacy. To

a great extent stress experience is based on the cognitive vulnerability of individuals. It is very important that how one perceive his or her environment. This perception helps in the construction of our belief system. Empirical researches suggest that self efficacy is perhaps the most important variable in job related stress and performance.

Keeping in view the importance of variables the present study aims to find out levels and sources of stress that teachers experience at their workplaces. It also aims to find out relationship of stress and job performance. It is found that job stress affects the performance of teachers negatively (Chance, 1992; Dickman & Emner, 1992). Studies have shown that one's efficacy effect one's behaviors. Self efficacy influence the amount of stress and ultimately performance (Bandura, 1997; Schwarzer, 1999). It has been also found that self efficacy plays a moderating role in teacher stress and job stress phenomenon. As earlier discussed that nobody in Pakistan has explored the dimensions of teacher stress and its relationship with job performance and self efficacy. It has been tried in the present research to explore these relationships. The present study also focused to find out the role of certain demographic and job related variables in the teacher stress, job performance, and self efficacy of women school teachers.

OBJECTIVES, HYPOTHESES, AND RESEARCH DESIGN

OBJECTIVES, HYPOTHESES, AND RESEARCH DESIGN

Objectives of the Research

The objectives of present research were as under:

1. To identify levels and sources of work stress in women school teachers
2. To find out the relationship of teacher stress, job performance and teacher efficacy.
3. To develop indigenous scales to measure teacher stress and job performance of school teachers.
4. To compare the levels and sources of work stress in teachers of government and private secondary schools.
5. To find out the moderator role of teacher efficacy in teacher stress and job performance of teachers.
6. To find out the relationship of teacher stress, job performance and teacher efficacy with some demographic variables i.e., age, job experience, number of students in class, marital status, family system etc.

Hypotheses of the Research

The following hypotheses were formulated about women secondary school teachers:

1. The teachers will frequently display high levels of stress.
2. Higher teacher stress will lead toward poor job performance and low teacher self efficacy.
3. Higher teacher self-efficacy will lead toward excellent job performance of teachers.
4. Teacher self-efficacy will play a moderator role for teacher stress and job performance of teachers.
5. Teachers with more job experience will show more stress, poor job performance and low self-efficacy as compared to less experienced.
6. Teachers with more age will show more stress, poor job performance and low self-efficacy as compared to teachers with less age.
7. Married teachers will display more stress, poor job performance and low self-efficacy as compared to unmarried teachers.
8. Teachers with more number of students in class will show more stress, poor job performance and low self-efficacy as compared to teachers with less number of students.
9. Teachers with less monthly income will show more stress, poor job performance and low self-efficacy as compared to teachers with more monthly income.
10. Government schools teachers will show more stress, poor job performance and low self-efficacy as compared to private school teachers

Research Design

The research was carried out in three parts.

Part I

The purpose of part one of the study was the development and validation of the scales. This part was consisted of four phases.

Phase I

Phase 1 of the Study was a try out to find out the relevance of Teacher Stress Inventory, TSI, (Fimian, 1984). In this phase the respondent were educationist; they were also asked about the understandability of items. On the bases of results it was decided that TSI (Fimian, 1984) is fairly comprised of items, which are relevant to our school teachers' work environment, but for better results it should be translated into Urdu.

Phase II

Phase II of the Study was conducted to translate TSI (Fimian, 1984) into Urdu and to determine the reliability and validity of scale. The phase two of the part I was consisted of the following steps.

Step1: Translation of Teacher Stress Inventory TSI (Fimian, 1984) into Urdu language.

Step 2: Back translation of Urdu translated TSI.

Step 3: Determination of face validity of TSI-Urdu.

Step 4: Determination of reliability, validity and norms of TSI-Urdu.

Phase III

The objective of this phase was to develop and validate a scale to measure the job performance of school teachers. Teachers Job Performance Scale (TJPS) was developed in three steps.

Step 1: Item generation for TJPS through an open-ended questionnaire.

Step 2: Categorization of items by judges.

Step 3: Determination of reliability, validity and norms for TJPS.

Phase IV

In the Phase IV of the part I, Teacher Efficacy Scale (TES) by Ahmad (2000) was evaluated to judge the face validity for the present research objectives. This evaluation was done through committee approach. A committee of three judges was consulted for this purpose. According to their opinion, some modification was done in the scale.

Part II (Pilot Study)

The part II of the study was consisted of pilot study. The purpose of pilot study was pre-testing of the scales developed in part I of the research and to identify levels and sources of teacher stress. Another objective was to find out the relationship of teacher stress, job performance and teacher efficacy. In this part relationship of teacher stress, job performance and teacher efficacy was also found with some demographic and job related variables.

Part III (Main Study)

Part III of this study was consisted of main study. The purpose of main study was to identify levels and sources of work stress among women secondary school teachers. The relationship of work stress was also found with job performance and teacher efficacy. Furthermore, relationship of these variables was determined with some job related and demographic variables.

The main study was carried out with two independent samples i.e., teachers and students. Samples of 330 women school teachers were randomly selected from secondary schools of Islamabad, Rawalpindi, and Chakwal. Two instruments, developed in the pilot study, TSI-Urdu and Teacher Efficacy Scale were administered to this sample, a demographic and job related information sheet was also given to this sample. Another sample of 990 students of above mentioned teachers were randomly selected. Teachers Job Performance Scale (TJPS) was administered to this sample. Randomly selected 3 students of each teacher were asked to evaluate the performance of their teacher.

METHOD

METHOD

The study was consisted of three parts.

Part I

The purpose of part I of the study was to develop scales and to find out the psychometric properties of these scales. Part I of the study was comprised of many phases.

Phase-I

Phase I of the part I was a try out to find out the relevance of Teacher Stress Inventory (TSI), developed by (Fimian, 1984) (see Appendix A). A sample of 30 educationist (school teachers, head teachers and professors) was selected from different educational Institutes of Islamabad. They were asked to examine all the statements carefully and rate which items are relevant to our school teachers' workplaces. They were also asked what they have understood in each item. In this way all the respondent have been through all the items. Analysis of responses revealed that all the statements were fairly relevant to our school teachers' workplaces, except item No. 48, and some of the items were not comprehended accurately by school teachers. This may be due to the variation in the context of the English and Urdu languages, and variations in the mediums. Item No. 48 was not relevant to our culture. It was decided that TSI (Fimian, 1984) could be used to measure the school teachers' stress levels and sources. For better understanding of items and more reliable results, it was also decided to translate the scale into Urdu. As Urdu is our national language, so it was assumed that one could

easily comprehend those items that are presented in Urdu. It was also decided to rephrase item No. 48 according to our culture.

Phase-II

The second phase was designed to translate the TSI (Fimian, 1984). For the purpose of translation it was decided to adopt Back Translation method. This process of translation was completed into four steps.

Step 1

The focus of this step was on the translation of teacher stress inventory (Fimian, 1984) into Urdu language. For more authentic results bilinguals were requested to provide as much accurate translation as possible.

Sample

A sample of 10 bilinguals (5 male & 5 female) was selected. Their educational qualification was at least M.A. Among them 5 had masters' degree in English with good understanding of Urdu language and other had masters' degree in Urdu with good command on English.

Procedure

The sample was approached individually. They were requested to translate the scale into Urdu independently. They were asked to translate the items of TSI as accurately as possible. The objective of this translation was to convey the meaning of the items of the original version of TSI in the best possible way keeping the contextual meanings intact. Item no. 48 "I respond to stress by using alcohol" was rephrased into "I

respond to stress by using drugs". Because use of alcohol is prohibited in our religion and culture.

Results

On the basis of responses, the closest translation with highest frequency was selected. This translation was then evaluated by three judges who were Psychologists (one Ph.D., one M.Phil. degree holders, and one the present researcher). On the basis of their evaluation the best possible translation that could convey the meanings closest to the original was retained. The translated 49 items were assigned 5 point rating scale (see Appendix B), having categories "Never" (کبھی نہیں), "sometimes" (کبھی کبھار), "often"(اکثر), "mostly" (زیادہ تر) "always" (ہمیشہ). The scores assigned to these categories were 1, 2, 3, 4, 5 respectively.

Step 2

To check the authenticity of Urdu translation it was back translated into English. Back translation technique was used as a method of reducing errors and biases in translation, of identifying points of equivalence and discrepancy between the two versions, and of producing a more equivalent final product. The back translation technique has been recommended by Rosen (1950), Brislin (1970), and Thorndike (1973).

Sample

A sample of 10 bilinguals comprised of 5 male and 5 female, having good command in English, were selected. Their Educational qualification was Masters in English having good command on their subjects. This sample was not familiar with the original version of TSI.

Procedure

The scale translated into Urdu was given to the sample. They were unfamiliar with the original version of TSI. They were requested to translate Urdu version of scale into English. They were asked to write as much as accurate translation as possible conveying the maximum similar meanings.

Results

Back translation (i.e., from Urdu to English) of the scale was evaluated on the basis of frequency. The closest translation with highest frequency was selected (see Appendix C). Two psychologists evaluated translation and back translation. All the items were conveying similar meanings in both versions of TSI. So Urdu translation was accepted and scale was finalized.

Step 3

In this phase, TSI-Urdu was given to experts for the purpose of determination of face validity of the scale. The objective was to evaluate whether these items are relevant to the work environment of teachers in Pakistan or not. For this purpose, the scale was given to 7 educationists. On the basis of their responses all the items were retained.

Step IV

The reliability and validity of Teacher Stress Inventory (TSI-Urdu) was determined in this step.

Sample

The 49-items of TSI-Urdu was administered on a sample of 150 women school teachers from Islamabad, Rawalpindi, and Chakwal. The sample was consisted on 75

teachers from Government Schools and 75 from Private schools. The criterion for the selection of teachers was, the minimum job experience of at least one year. The mean age and job experience of the teachers was 37 and 11 years respectively.

Determination of Reliability and Validity

For the determination of Reliability and Validity of TSI-Urdu following statistical analysis were carried out:

1. Cronbach's Alpha Coefficient
2. Split half reliability
3. Item total correlations
4. Interscale correlations
5. Cross-Language validity

Cronbach's Alpha Coefficients

Initial psychometric analysis, using Cronbach Alpha Coefficient yielded an internal consistency coefficient of .85 for the entire 49 items. For sub-scales it ranges from .27 to .80 (Table 1).

Table 1

Alpha Reliability Coefficients of total and subscales of TSI- Urdu (N = 150)

	Subscales	No. of Items	Alpha Coefficient
I.	Time Management	8	.69
II.	Work-Related Stressors	6	.72
III.	Professional Distress	5	.68
IV.	Discipline and Motivation	6	.63
V.	Professional Investment	4	.64
VI.	Emotional Manifestations	5	.75
VII.	Fatigue Manifestations	5	.66
VIII.	Cardiovascular Manifestations	3	.80
IX.	Gastronomical Manifestations	3	.73
X.	Behavioral Manifestations	4	.27
	Total	49	.85

Table 1 shows that all the subscales are internally consistent measures. The total alpha coefficient is .85. On the subscale "Behavioral Manifestations" the alpha coefficient is low i.e., .27 but has positive correlation. For other subscales there is significant reliability. The sub-scale "Cardiovascular Manifestations" has the highest alpha coefficient (.80).

Split Half Reliability

For calculating the split half reliability coefficient, TSI- Urdu was divided into two parts with 25 items in the first part and 24 items in the second part. The correlation coefficient between two parts was found .51 and for the subscales it ranges from .31 to .81.

Table 2

Split half Correlation coefficient among total and subscales of TSI-Urdu (N = 150)

	Subscales	No. of Items	Correlation
I.	Time Management	8	.70
II.	Work-Related Stressors	6	.81
III.	Professional Distress	5	.60
IV.	Discipline and Motivation	6	.52
V.	Professional Investment	4	.44
VI.	Emotional Manifestations	5	.60
VII.	Fatigue Manifestations	5	.41
VIII.	Cardiovascular Manifestations	3	.81
IX.	Gastronomical Manifestations	3	.60
X.	Behavioral Manifestations	4	.31
	Total	49	.51

Table 2 shows that split half correlation coefficient of total and subscale scores of TSI-Urdu are significant. For "Behavioral manifestations" subscale again it is low correlation but it is quite satisfactory.

Intercorrelations among subscales

The internal consistency was further determined by inter-correlation of the sub-scales as well as with that of the total score on TSI- Urdu.

Table 3

Interscale Correlations of TSI-Urdu (N = 150)

	Subscales	I	II	III	IV	V	VI	VII	VIII	IX	X
I.	Time Management										
II.	Work-Related Stressors	.47**									
III.	Professional Distress	.19*	.18*								
IV.	Discipline and Motivation	.24**	.19*	.28**							
V.	Professional Investment	.18*	.18*	.47**	.37**						
VI.	Emotional Manifestations	.08	.09	.29**	.38**	.49**					
VII.	Fatigue Manifestations	.14	.04	.22*	.28**	.38**	.56**				
VIII.	Cardiovascular Manifestations	.12	.09	.09	.32**	.13	.18*	.29**			
IX.	Gastronomical Manifestations	-.13	-.18*	-.05	.20*	.12	.16	.18*	.29**		
X.	Behavioral Manifestations	.03	.02	.04	.14	.21*	.29*	.36**	.36**	.32**	
	Total	.55**	.42**	.51**	.68**	.62**	.61**	.64**	.45**	.24**	.42**

*$p<.05$, **$p<.01$

Table 3 presents the correlations among the subscales and total scale scores for the sample. The results indicate that low to moderate correlations exists between and among the subscales scores. In reviewing the relationships between the subscales and the TSI-Urdu total scores, it was evident that all the subscales have significant positive correlation with total scores. The "discipline and motivation" subscale has highest correlation (r = .67*), and "Gastronomical manifestations" is least related to TSI-Urdu total scores (r = .23*). Some of the subscales have non-significant but positive correlations". "Gastronomical manifestations" have negative and non-significant

correlation with "time management", and "professional distress", and negative but significant correlation with "work related stressors".

Table 4

Item total Correlation (N =150)

Items	Correlations	Items	Correlations
I	. 32**	26	.50**
2	.26*	27	.50**
3	.36**	28	.37**
4	.38**	29	.32**
5	.43**	30	.38**
6	.27*	31	.34**
7	.55**	32	.41**
8	.24*	33	.46**
9	.54**	34	.55**
10	.46**	35	.27*
11	.29*	36	.52**
12	.24**	37	.43**
13	.41**	38	.47**
14	.31*	39	.38**
15	.39**	40	.34**
16	.35**	41	.42**
17	.31*	42	.41**
18	.34**	43	.24*
19	.32**	44	.31*
20	.41**	45	.31**
21	.47**	46	.39**
22	.44**	47	.21*
23	.41**	48	.21*
24	.35**	49	.28**
25	.35**		

*$p<.05$, **$p<.01$

To determine the internal consistency of scale and examine their relevance with the test, item total correlation was calculated because item total correlations are directly

related to the reliability of a test (Nunnaly, 1982). Table 4 indicates that all the items are significantly correlated.

Cross- Language Validity

The next step was to cross validate the TSI-Urdu and original TSI English version. To assess the quality and empirical equivalence of TSI-Urdu, a sample of two independent groups of school teachers (N =30, 30) were selected. They were selected from Secondary Schools. Their qualification was masters and they all had good understanding of both English and Urdu languages. The first group was given English version of TSI on the first day and TSI-Urdu on the second day. The second group was given TSI-Urdu on the first day and English version on the second day. In the original TSI, item no. 48 was converted into "I respond to stress by using drugs". The obtained scores were then correlated (Table 5).

Table 5

Correlations of TSI-Urdu and TSI-English (n= 30,30)

Groups	TSI - Version	Correlations
Group 1	English - Urdu	.80**
Group 2	Urdu - English	.71**

***p < .01*

Table 5 shows that two independent groups have highly significant positive correlation between Urdu translated and original version of TSI. It indicates cross language validity of TSI- Urdu and shows that both original and translated version is conceptually reliable measures of teacher stress.

Cut off Points

Cut of scores were determined by analyzing percentile scores of the subjects and criteria followed was one standard deviation plus and one standard deviation below

mean scores of the subjects. Cut off scores were determined for three categories of stress levels i.e., mild stress, moderate stress and high stress. A mean score below 2.11 was determined as mild stress. Scores ranging from 2.12 to 2.98 was taken as indicator of moderate stress, whereas scores above 2.98 was determined for high level of stress.

Table 6

Percentile Ranks and sores of teachers on TSI-Urdu (N = 150)

Percentiles	Scores
1	1.60
5	1.80
10	1.83
15	1.95
20	2.11
25	2.32
30	2.44
35	2.50
40	2.51
45	2.53
50	2.54
55	2.71
60	2.74
65	2.78
70	2.83
75	2.88
80	2.98
85	3.06
90	3.16
95	3.39
99	3.82

Analysis of percentile ranks reveal that score 2.11 lies on 20th percentile and 2.98 on 80th percentile. On 50th percentile the score is 2.54 that is the average score.

Phase III

This phase of study was carried out to develop and validate the "Teachers' Job Performance Scale" (TJPS). The development of this scale was comprised of three steps.

Step 1: Item Generation

Sample

A sample of 60 students, 40 teachers and 20 headmistresses (both male and female) was randomly selected from different schools of the Islamabad, Rawalpindi, and Chakwal.

Procedure

The first step to develop TJPS was the generation of items. An open-ended questionnaire was given to the sample of 60 students, 40 teachers and 20 headmistresses to find out their views about the dimensions of job performance of a school teacher (see Appendix D). They were asked to mention all those behaviors, qualities and aspects, which they consider, are important for a school teacher for the good job performance.

The responses of the sample were carefully analyzed and were converted into statements. These statements were arranged in frequency distributions. The statements with highest frequency were selected for making an item pool. In this way a pool of 50 items was generated (see Appendix E). All these statements were showing different dimensions of teachers' job performance. These statements were carefully examined and scrutinized by the researcher with the help of literature review.

Step 2: Item Evaluation

In the next step, judges evaluated items generated in the form of statements. The purpose was to clearly categorize the items into different categories and to check the inter-ratter reliability. Initially, these 50 statements pertaining to different categories were given to 5 judges and they were asked to derive the categories of teachers' job performance. Based on the opinion of judges, six dimensions of teachers' job performance were derived as categories e.g., teaching quality, teaching style, subject knowledge, management skills, discipline and regularity, and interpersonal skills.

After deriving these categories, the 50 statements were given to a sample of 20 educationist and they were asked to categorize each item into their respective category of job performance of school teachers (see Appendix F). The criterion for the selection of the items for different categories was 75 % consensus among the sample. The coefficient of concordance was also computed for the ratings of the sample. The judges also evaluated the face validity of the items. Some items were repeating concepts and some were not clearly relevant to the categories of job performance. Only 27 out of total 50 statements could be clearly categorized under the six categories of teachers' job performance (see Appendix G). These statements were written with a five point rating scale "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)", "mostly (زیادہ تر)", "always (ہمیشہ)". This 27-item scale was developed in two versions. One for the ratings by students, headmistresses or colleagues and other for the self ratings of teachers (see Appendix I).

Step 3 : Empirical Evaluation

Sample

A sample of 180 girls students from 9th and 10th classes of Government and Private Secondary schools of Islamabad, Rawalpindi and Chakwal were selected. From each class 3 students were randomly selected for the rating of one teacher.

Procedure

In this phase, the scale comprising of 27 items with 5 point rating scale was given to 180 students. From each class 3 students were randomly selected and they were asked to rate their one teachers' performance individually. In this way total 60 teachers were evaluated by their students. They were rated on five point scale as "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)" "mostly (زیادہ تر)" and "always (ہمیشہ)". The scores assigned to this scale were ranging from 1 to 5. The mean score of all 3 students for each teacher was computed.

Determination of Reliability and Validity

For the determination of reliability and validity of TJPS following statistical analysis were carried out:

1. Factor analysis
2. Item total correlation
3. Inter-scale correlations
4. Cronbach's Alpha Coefficient
5. Split half reliability
6. Inter-rater reliability

Factor analysis

To find out the empirical value of six categories of TJPS responses to scale were put to Principle component factor analysis. The rotated extraction method was used to extract the factors. Loadings equal to or greater than .35 were considered as significant. The results indicated that Eigen values greater than 1.00 supported only four factor solution and accounted for 76 % of the variance.

Table 7

Factor loadings for the items of TJPS obtained from the principal component Factor Analysis (n = 180) (items = 27)

Items	F1	F2	F3	F4
	Items (6)	Items (5)	Items (7)	Items (7)
*1	.20	.11	.23	.13
2	**.58**	.41	.23	.31
*3	.11	.24	.31	.19
4	**.58**	.30	.40	.33
5	**.82**	.35	.33	.11
6	**.41**	.31	.12	.28
7	**.50**	.20	.34	.29
8	**.42**	.02	.25	.32
9	.32	**.65**	.34	.23
10	.10	**.73**	.42	.25
11	.23	**.74**	.16	.20
12	.10	**.70**	.16	.29
13	.30	.11	.21	**.81**
14	.22	**.52**	.25	.33
15	.25	.25	**.60**	.25

Continued...

Items	F1 Items (6)	F2 Items (5)	F3 Items (7)	F4 Items (7)
16	.34	.24	**.64**	.24
17	.42	.12	**.91**	.12
18	.16	.27	**.77**	.27
19	.16	.12	**.87**	.12
20	.21	.22	**.91**	.22
21	.25	.21	.20	**.84**
22	.26	.25	.24	**.51**
23	.23	.25	.12	**.91**
24	.24	.10	.27	**.86**
25	.13	-.12	.15	**.74**
26	.27	.17	.22	**.71**
27	.12	.12	**.81**	

* Item loadings < .35

Table 7 shows the loadings of the selected items of TJPS on four factors. These factors were named as TS (teaching skills), MS (management skills), DR (discipline and regularity) and IS (interpersonal skills). The loadings were obtained when principal component factor analysis was run to determine the factor structure of the scale. The criterion for the selection of items was loading of .35 and above. The item Nos. 1 and 2 was not falling on the criteria and did not show clear picture of its dimension, so these two items were excluded from the scale and other 25 items were retained for the final scale (see Appendix N).

Table 8

Eigen values and percentage variances explained by the extracted factors for the TJPS

Factor	Eigen values	PCT of variance	Cum percentages
F1	6.62	26.50	26.50
F2	5.60	22.30	48.80
F3	4.50	17.90	66.62
F4	2.22	8.90	75.52

Table 8 demonstrates the Eigen values and percentages of variance explained by the four factors. It shows that F1 has an Eigen value of 6.62 and explain 26.50 % of the total of the variance that is the highest value among four factors. All other factors have Eigen values above 2.22 and total variance explained by the four factor is 76 %.

Item Total Correlation

To determine the internal consistency of scale and examine their relevance with the test item total correlation was calculated because item total correlations are directly related to the reliability of a test (Nunnaly, 1982).

Table 9

Item total correlation of TJPS (N = 180)

Items	Total scores	Items	Total scores
1	.41**	14	.63**
2	.60**	15	.70**
3	.43**	16	.61**
4	.62**	17	.65**
5	.70**	18	.74**
6	.73**	19	.70**
7	.82**	20	.90**
8	.64**	21	.73**
9	.70**	22	.70**
10	.80**	23	.50**
11	.80**	24	.47**
12	.80**	25	.50**
13	.80**		

**$p < .01$

Table 9 shows that all the items are significantly correlated with total score of TJPS. The correlation coefficient ranges from .41 to .90 for all the 25 items of scale. It shows that all the items are consisted with the total scores of scale. It determines the reliability and construct validity of scale as well.

Inter-scale correlation coefficient

The internal consistency was further determined by inter-correlation of every scale as well as with that of the total score on TJPS. All the correlations are found significant.

Table 10

Inter-correlations for scores on TJPS (N=180)

Subscales		I	II	III	IV
1.	Teaching skills				
2.	Management skills	.48**			
3.	Interpersonal skills	.60**	.45**		
4.	Discipline and regularity	.28**	.80**	.40**	
	Total	.70**	.84**	.82**	.80**

**$p < .01$

Table 10 shows inter-correlation of scores on subscales as well as with total scores for TJPS. The data indicates that all the subscales of TJPS have significant correlation with each other and with total scores. It shows the internal consistency of scale. The highest correlation is found between subscales of management skills and discipline and regularity (.80), and minimum correlation is between teaching skills and discipline and regularity (.28).

Cronbach's Alpha Coefficients

Initial psychometric analysis, using Cronbach's alpha coefficient yielded an internal consistency coefficient of .94 for the whole 25-items and ranges from .80 to .92 for the subscales.

Table 11

Alpha Reliability Coefficient of total and subscales of TJPS (N=180)

	Subscales	No. of items	Alpha Coefficient
I	Teaching Skills	6	.80
II	Management Skills	5	.90
III	Discipline and Regularity	7	.92
IV	Interpersonal Skills	7	.91
	Total	25	.94

Split Half Reliability

For calculating the split half reliability coefficient, the TJPS was divided into two parts with 13 items in the first part and 12 items in the second part. The correlation coefficient between two parts was found .87.

Table 12

Split half reliability coefficient for scores on total and subscales of TJPS (N=180)

Subscales	Items	Correlation
1. Teaching skills	6	.67
2. Management skills	5	.89
3. Discipline and regularity	7	.90
4. Interpersonal skills	7	.84
Total	25	.87

Inter rater reliability

To determine the reliability of performance measures inter-rater reliability is widely used technique. In this method ratings are judged on another independent

sample's ratings. These correlations also indicate the external criteria for the validity of a scale. For TJPS inter-correlation of ratings of students, headmistresses and teachers' self ratings were calculated. A sample of 30 teachers, 30 headmistresses and 30 students were selected for this purpose. The ratings of all three groups were correlated.

Table 13

Inter-correlations of the ratings by students, headmistresses and teachers' self ratings on TJPS (n= 30,30,30)

Raters	Students	Headmistresses	Self
Students	-	.89**	.21
Headmistresses	-	-	.62**
Self	-	-	-

***p< .01*

Table 13 indicates that students' ratings for their teachers' job performance has significant correlation with the ratings of these teachers' headmistresses. The students' ratings have positive but non-significant correlation with self-ratings of teachers. The teachers' self-ratings have significant correlation with the ratings by their headmistresses.

Cut off points

The cut off points for the scale can be determined through the percentile analysis, its frequency distribution of the scores and the scores corresponding to these percentiles. The frequency distribution for total sample of students can be used to locate cutting points for different levels of job performance in teachers. Percentiles are derived scores expressed in terms of the percentage of persons in the sample where scores fall below a given raw score.

Table 14

Percentile ranks and scores on TJPS (N=180)

Percentile	Scores
1	38
5	50
10	62
15	68
20	81
25	85
30	88
35	88
40	88
45	88
50	89
55	90
60	91
65	93
70	94
75	95
80	96
85	96
90	97
95	107
99	108

Table 14 indicates the percentile scores for Teacher's Job Performance Scale (TJPS). In this case a score of 85 fall on the 25^{th} percentile, whereas, a score of 89 fall on the 50^{th} percentile and a score of 95 fall at 75^{th} percentile Cut off scores for three levels of performance in teachers i.e., poor, average and excellent was determined as scores below 85 as indicative of teacher's poor performance, above 95 as excellent performance and scores ranging from 86 to 95 as indicative of average performance of teachers as rated by students on Teachers Job Performance Scale (TJPS).

Phase IV

In the Phase IV of Pilot Study Teacher Efficacy Scale (TES) by Ahmad, 2000 (see Appendix J) was modified according to research objectives. This modification was done through committee approach. A committee of three judges was consulted for this purpose.

Teacher Efficacy Scale translated and adapted into Urdu by Ahmed, 2000, originally developed by Gibson and Dembo (1984), was comprised of 18 items. This scale was comprised of two independent categories i.e., Teaching efficacy and personal efficacy. This was four point rating scale i.e., "mostly agree (کافی متفق)", "agree (متفق)", "disagree (غیر متفق)", and "mostly disagree (کافی غیر متفق). The scores assigned to these rating scales were 1, 2, 3, 4 for teaching efficacy and vis versa 4, 3, 2, 1 for teaching efficacy. The scores of a subject was sum of the scores on each item for total scale and subscales. The average score was taken to determine the low efficacy and high efficacy of subjects.

The TES (Ahmad, 2000) was given to three judges and asked to evaluate the items for the present research purpose. Through committee approach it was decided that two items i.e., item Nos. 2 and 12 should be excluded. Item No. 2 was repeating the concept. And Item 12 was related to Mathematics, our sample was including all humanities and science subjects. So these two items were excluded from the scale. Finally, selected items of TES (Ahmad, 2000) with 16 items were rephrased for the purpose of data collection in main study from the sample of women school teachers (see Appendix K). The psychometric properties of this modified TES (Ahmad, 2000) were determined in the part III (main study) of this research.

Discussion

The part I of this study was carried out for the development and adaptation of instruments to be used in the main study. For the main study three scales were constructed. Teacher Stress Inventory (Fimian, 1984) was translated and adapted to measure the phenomenon of stress in teachers. For the evaluation of teacher's job performance another scale, Teachers Job Performance Scale (TJPS) was developed. The reliability and validity of these two scales were also determined. Another scale Teacher Efficacy Scale (Ahmad, 2000) was modified for the present research purposes.

Translation and Adaptation of Teacher Stress Inventory

The present study is an attempt to provide an instrument as an assessment measure to identify levels and sources of teacher stress, which can be used in educational clinical and research settings. The study attempted to adapt and translate a scale in Urdu that can measure levels and sources of work stress in school teachers. The "Teacher Stress Inventory" (TSI) is a reliable and valid measure for measuring teachers' work stress. Fimian (1984) has used it successfully for primary, elementary, secondary school teachers. The stressful events measured by the TSI are different from those in other scales measuring occupational stress. They address general stress or burnout and the TSI assesses numerous stressful teaching events experienced on the job and in the schools. According to Fimian, the occupational stress experienced by teachers is actually a multiple factor construct, and these factors are significantly related to one another. Moreover, the teacher stress is related to a number of work, job, and organizational variables in terms of both predicted directions and magnitudes.

Teacher stress is related more to environmental events, and the teacher's perception of these events, than it is to personal or professional variables such as teacher gender, age education level, number of students, and numbers of years teaching. Fimian (1982) also explained that frequency with which stressful incidents occur and the strength of their occurrence varies from teacher to teacher. A multitude of factors including situational demands, appraisal to that situation etc., cause the stress.

The factors describe in teacher stress model (Fimian, 1984) are: Time Management, Work related stressors, Professional distress, Discipline and motivation, Professional investment, Emotional Manifestations, Fatigue manifestations, Cardiovascular manifestations, Gastronomical manifestations, Behavioral manifestations.

The present study was conducted to prepare an Urdu version of equivalent status of original English version of TSI. The scale was translated by using back- translation method that is a valid method of translation. The face validity was obtained by the opinion of judges and teachers themselves. The empirical reliability and validity is also computed. Coefficient alpha was computed to determine the internal consistency of the scale (Cronbach, 1984). The alpha reliability for the total scale is .85 and for subscales there is also sufficient reliability excluding one subscale i.e., behavioral manifestation. The alpha coefficient for this scale is .27 that is comparatively low. But the positive correlation shows the same direction that is satisfactory. Moreover, it was observed that in the development procedure of original TSI the "Behavioral Manifestations" had the weakest correlation with total scores of TSI (Fimian, 1984). To strengthen the reliability of scale, split half reliability was also computed and that was also satisfactory.

The internal consistency was further determined by inter-scale correlations. The results indicate that low to moderate correlations exists between and among the subscales scores. On the bases of the results of inter-scale correlation and item total

correlation, we can infer that TSI-Urdu has sufficient reliability and validity as it was observed that all the items were significantly correlated. So all the items were retained in TSI-Urdu.

As it was suggested by some researchers that internal consistency measures may be taken as evidence of validity (Cronbach & Meehl, 1955) and if underlying theory of the attitude being measured suggests high item inter-correlations, then measures of internal consistency may be interpreted as evidence of construct validity (Shaw & Wright, 1967).

Although inter-scale correlations and item total correlations determined sufficient validity of scale, cross language validity was further determined to assess the quality and empirical equivalence of TSI-Urdu. The results indicate quite satisfactory correlations between the scores of Original TSI and TSI-Urdu.

To determine the cut off points for the scale, percentile scores were calculated. These cut off points would enable the researcher to differentiate levels of teacher stress i.e., mild , moderate, and high stress.

On the basis of empirical evaluations we can assume that TSI-Urdu is a reliable and valid scale for measuring work stress in school teachers. It can be used for measuring sources and levels of stress among teachers of primary, elementary or secondary schools. It can also be used for teachers of different categories such as teachers from regular, special education or vocational schools. The psychometric properties of TSI-Urdu for these specific samples of teachers can be determined on the basis of empirical data.

A very few Studies have been conducted on teacher stress in Pakistan. They have used the occupational stress inventories. These inventories are used for all the work organizations, e.g.; industries, banks etc. Schools have somehow a different type of work environment. Teachers are just not employees who do their duties for salaries.

They are the builders of nations. They have direct impacts on youngsters and indirect impacts on society. It was a need to develop an indigenous scale specifically to measure stress in teachers. So TSI-Urdu can be used according to the requirements and further psychometrics properties can be determine on a larger sample.

Development of Teachers Job Performance Scale

There are many sources for the evaluation of teachers' job performance i.e., by head teachers, colleagues or students. The ratings of teachers by students are the most commonly used technique, because the students are in unique position to judge such matters and facts, which are relevant to a competent teaching such as teaching style, punctuality, management ability etc. (Scriven, 1996). The recognition of students' ratings of their teachers' performance has short history but has enormous vitality and strength (McKeachie, 1990) in construction of several tests. Most of these tests aim at assessment of variables considered relevant to good teaching (Doyle, 1994). Aleamoni (1981) support the student ratings of teacher performance, as students are the main source of information about learning and classroom environment including teachers' ability, competency and communication skills.

The Teachers' Job Performance Scale (TJPS) is designed to evaluate teachers' job performance at their workplaces. It can help to identify the strengths and weaknesses of teachers' performance at individual and organizational level and can help to improve the quality and effectiveness of teaching.

The scale was developed through a standardized procedure. The empirical evaluation shows that it has sufficient reliability and internal consistency. The construct validity of scale was determined through factor analysis and item analysis. The results revealed that 25 out of 27 items were clustered into four factors clearly showing for

dimensions of teachers' job performance. The four-factor solution is consistent with previous studies (Jahangir, 1988; Riaz, 2000).

The factors determined in the present research were named as TS (teaching skills), MS (management skills), DR (discipline and regularity) and IS (interpersonal skills). Initially six factors of job performance were determined on the basis of literature review and opinions of judges. These factors were categorized as teaching quality, teaching style, subject knowledge, management skills, discipline and regularity and interpersonal skills but empirical analysis revealed only four factors. So through committee approach, the items pertaining to teaching quality, teaching style and subject knowledge were merged into one factor and it was named as teaching skills. Two of the items which were not clustered on any factor (Item loadings < .35) were excluded from the scale and finally TJPS was retained with 25 items.

The ratings by judges reveal the sufficient content and face validity of this scale. The results also indicate sufficient reliability and internal consistency of the scale that was determined through empirical analysis of the data. The TJPS has revealed the alpha coefficient for TJPS was .94 and for subscales it ranges from .80 to .92. the values obtained were highly significant indicating the scale as a reliable and internally consistent measure. The split half reliability is also quite satisfactory and it has strengthened our results. Item total correlations and inter scale correlation also showed significant results and these results suggests that TJPS is a reliable and valid scale. As some researchers suggested that internal consistency may also be taken as evidence of validity (Cronbach & Meehl, 1955).

Moreover inter rater reliability was also determined to cross validate the ratings of students for their teachers and it was observed that students' ratings are significantly correlated with headmistresses' ratings. The correlation with self-ratings of teachers were also computed, rather it was non significant but positive correlation was existing.

The correlation of teachers' self ratings and ratings by headmistresses was also significant.

To differentiate different categories of teachers' job performance i.e., poor, average excellent, cut off points were determined through percentile scores. The range of cut off points enabled us to interpret the scores of the children against the sample studied. Although these cut off points could not be estimated as definite points. The assessment based on cut off scores has to be repeatedly validated in various groups of sample.

It may be concluded that TJPS is a reliable and valid scale, which is easy in administration and scoring procedure. It can be used in the schools of the region to evaluate the teachers' performance, wherever Urdu language is a means of communication.

Part II (Pilot Study)

The part II of the study was comprised of pilot study. The main objective of pilot study was pre-testing of scales on a small sample.

Objectives

The specific objectives of pilot study were:

1. To find out levels and sources of stress among women school teachers.
2. To find out the relationship of teacher stress, job performance and self efficacy.
3. To find out the relationship of demographic variables with teacher stress, job performance and self efficacy of women school teachers.

Sample

Two samples were used for this study. Sample I consisted of women school teachers and sample II was consisted of students of these teachers. *Sample I* comprised of 60 women school teachers from government and private secondary schools of Islamabad, Rawalpindi, and Chakwal. The teachers' age range was 25-48 and job experience ranges from 1-14 years. *Sample II* was comprised of 180 students of teachers of sample I. Three students were randomly selected to evaluate one teacher from 9^{th} and 10^{th} classes.

Instruments

The following instruments, which were developed in part I of the study, were used in this pre-testing study.

1. Teacher Stress Inventory (TSI-Urdu)
2. Teachers' Job Performance Scale (TJPS)
3. Teacher Efficacy Scale (TES)
4. A job related and demographic information sheet

Procedure

The Teacher Stress Inventory (TSI-Urdu) and Teacher Efficacy Scale were given to the sample I. They were approached at their schools. They were asked to rate the statements honestly. Some personal, demographic and job related information were also collected on a separate questionnaire (see Appendix L). Teacher Job Performance Scale was given to sample II. They were asked to rate their teachers' performance at their job. Each teacher was evaluated by three students.

Results

In order to know the levels of stress in women teachers, the means of the mean scores on total and subscales of TSI-Urdu was computed. Fimian (1984) also used the same analysis for determining the levels of stress. The cut off points determined for TSI-Urdu was categorized into three groups i.e., mild, moderate and high levels of stress. The score of 2.11 and below was determined as mild stress, 2.12 to 2.97 as moderate and 2.98 and above as high level of stress. According to these cut off scores levels of stress can be determined for TSI-Urdu scores on subscales and total.

Table 15

Means and standard deviations of levels of stress for the scores on TSI-Urdu (N =60)

Levels of stress	*n*	Percentages
Mild stress	12	20%
Moderate stress	36	60%
High stress	12	20%

Table 15 shows that percentages are high for the group categorized as moderate levels of stress.

Table 16

Means and Standard Deviation on the subscales of TSI-Urdu (N = 60)

Subscales	*M*	*SD*
1. Time management	3.13	.73
2. Work-related stressors	3.44	.81
3. Professional distress	3.35	.90
4. Discipline and motivation	3.08	.81
5. Professional investment	2.48	.86
6. Emotional manifestations	2.22	.82
7. Fatigued manifestations	2.44	.84
8. Cardiovascular manifestations	2.11	1.12
9. Gastronomical manifestations	1.63	.82
10. Behavioral manifestations	2.02	.63
Total	2.54	.43

To find out the sources of stress in women school teachers Means and Standard Deviations were calculated. Table 16 shows that on the sources of "professional

distress", "time management, work stressors and discipline and motivations" teachers mean scores are high. Results indicate that the strength of the subscales varied to a degree. Work related stressors and professional distress ranked the highest and gastronomical and behavioral manifestations the lowest. Overall mean scores for the stress source factors were larger than were those of stress manifestations, thus the strength of the sources of teacher stress exceeded that of the manifestations of teacher stress. Total stress scores strengths, with a mean of 2.54 and standard deviation of .43, repeated by sample in the range of moderate level of stress.

Table 17

Means and standard deviations of TJPS and its subscales (N = 180)

Scales	No. of items	*M*	*SD*
TS	6	19.88	3.69
MS	5	18.31	3.76
DR	7	25.80	5.38
IS	7	22.20	6.01
TOTAL	25	86.21	15.21

The results in Table 17 indicate that mean scores for TJPS are *86.21 (SD* = 15.21) that fall in the category of average performance of teachers. For the subscales, there are highest scores on discipline and regularity *(M*= 25.80, *SD* = 5.38), then there are interpersonal skills *(M*= 22.20, *SD* = 6.01), teaching skills *(M* = 19.88, *SD* = 3.69), and lowest scores fall on the subscale management skills *(M* = 18.31, *SD* = 3.76).

Table 18

Means and standard deviations of TES and its subscales (N = 60)

Scales	No. of items	M	SD
PE	8	28.31	3.03
TE	8	14.11	2.19
TOTAL	16	41.12	3.61

Table 18 shows means and standard deviation for TES and its subscales. The results indicate that mean scores on total TES is 41.12 *(SD* = 3.61), for Personal Efficacy *M* = 28.31, *SD* = 3.03 and Teaching Efficacy *M* = 14.11, *SD* = 2.19. The results indicate that scores on personal efficacy are high as compared to teaching efficacy.

Table 19

Correlation of three scales TSI, TJPS, TES

Scales	TSI	TJPS	TES
TSI	-	-.45*	-.63**
TJPS	-	-	.74**
TES	-	-	-

*p< .05 **p< .01

The results in Table 19 show that there is significant negative correlation of TSI with TJPS and TES, and significant positive correlation between TJPS and TES.

Table 20

Means and standard deviations for teachers' scores on TSI-Urdu from three cities i.e., Islamabad, Rawalpindi and Chakwal (N = 60)

Cities	Means	Standard Deviations
Islamabad	2.70	.32
Rawalpindi	2.41	.51
Chakwal	2.64	.53

The mean scores of teachers with different cities are different. High mean scores are displayed by the teachers of Islamabad.

Table 21

City-wise One Way Analysis of Variance (ANOVA) for teachers scores on TSI-Urdu (N = 60)

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	3485.45	2	1742.72	4.017	.021
Within Groups	50755.35	57	433.80		
Total	54240.80	59			

Table 21 shows significant difference in the teachers of Islamabad, Rawalpindi and Chakwal on their total scores on TSI, $F(2, 119) = 4.017\ p < .021$.

Table 22

Means and Standard Deviation and t-value of Government and Private Schools for TSI (N = 60)

School Type	*n*	*M*	*SD*	*t*	*p*
Government	30	122.37	21.36		
				1.648	.031
Private	30	110.83	21.43		

Table 22 indicates significant differences in the government and private school teachers' scores on TSI-Urdu ($t = 1.648$, $p <. 05$). The mean scores show that teachers from government schools display more stress as compared to private school teachers.

Table 23

Marital status-wise Means and Standard Deviation and t-value for TSI (N = 60)

Marital Status	*n*	*M*	*SD*	*t*	*p*
Married	25	134.40	21.34		
				2.63	.012
Unmarried	35	112.13	17.51		

Table 23 indicates marital status wise differences of teachers' scores on TSI-Urdu. The results are significant ($t = 2.63, p < .05$).

Table 24

Family System-wise Means and Standard Deviation and t-value for TSI (N = 60)

Family System	*n*	*M*	*SD*	*t*	*p*
Joint	38	127.40	23.34		
				2.41	.018
Nuclear	22	137.13	16.51		

Table 24 shows that teachers with nuclear family system display high mean scores as compared to joint family system. The results are significant.

ANOVA and t-test was also computed to find out the differences on TSI with some demographic variables as job experience, monthly income, means of transport, number of students, teaching hours, teachers' taught subjects, number of family members and distance from school etc. All the analysis shows non-significant differences.

The data was also analyzed to find out the differences between different groups with regard to age, job experience, marital status, school systems, family systems etc. on the other two scales i.e., TJPS and TES. ANOVA and *t*-test analysis were computed for this purpose. All the results indicate non- significant results.

Table 25

Correlations of TSI-Urdu and its subscales with demographic variables (N = 60)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Time Management	.28**	.29**	.18**	.20**	-.22**
Work-Related Stressors	.23**	.20**	.15**	.15**	.02
Professional Distress	.38**	.30**	.34**	.24**	.15**
Discipline and Motivation	.41**	.42**	.33**	.43**	.10
Professional Investment	.35**	.35**	.26**	-.01	.12
Emotional Manifestations	.29**	.32**	.23**	.15**	.01
Fatigue Manifestations	.36**	.33**	.14*	.35**	.16**
Cardiovascular Manifestations	.45**	.23**	.34**	.09	.07
Gastronomical Manifestations	.29**	.25**	.15**	.03	.02
Behavioral Manifestations	.33**	.13*	.13*	.29**	.24**
Total	.62**	.59**	.34**	.24*	.19**

$*p < .05$, $**p < .01$

Table 25 indicates the correlations of teachers' scores on TSI-Urdu total and its subscales with demographic variables. There are different correlations on different variables but there are positive significant correlations of all the variables with total score.

Table 26

Correlations of TES and its subscales with demographic variables (N = 60)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Personal efficacy	.28**	.29**	.16**	.01	.12
Teaching efficacy	.26**	.26**	.25**	.24*	.19**
Total	.36**	.44**	.54**	.16**	.15**

*$p < .05$, **$p < .01$

Table 26 shows that TES has significant positive correlation with all the demographic variables. The subscale Personal Efficacy has non-significant results with number of students and family members.

Table 27

Correlations of TJPS and its subscales with demographic variables (N = 180)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Teaching skills	.18**	.19**	.16**	.26**	-.02
Management skills	.36**	.36**	.15**	.33*	.09
Discipline and regularity	.25**	.31**	.24**	.24**	.05
Interpersonal skills	.26**	.33**	.23**	.43**	.10
Total	.35**	.46**	.56**	.45**	.12

*$p < .05$, **$p < .01$

Table 27 indicates the correlations of teachers' scores on TJPS and its subscales. The results show that scores on TJPS has significant positive correlation with all demographic variables except number of family members. This variable has also negative but non-significant correlation with the subscale Teaching Skills and positive but non significant correlation with other subscales.

Discussion

After the development of scales in part I of the study, a pilot study was conducted. The purpose of this study was to explore the levels and sources of teacher stress, and to find out the relationship of teacher stress with other variables i.e., job performance and self efficacy. The relationship of these variables were also found with some demographic variables such as age, job experience, number of students, monthly income and number of family members at home. This study was a try out with a small sample. For this study no hypothesis was formulated because it was conducted just to explore the prevalence of teacher stress phenomenon and its relationship with other variables. We would not interpret any results in this stage but we could just explain the results.

On the basis of cut off points determined in part I of this research, three levels of teacher stress were determined i.e., mild, moderate, high. The results indicated that more number of teachers have moderate levels of stress. In the present sample it was revealed that 60% women school teachers showed moderate levels of stress and rest of them were from high and low levels of stress. It showed the prevalence of teacher stress, rather it is of moderate level. The literature review revealed that teaching is highly stressful profession but some researches also suggested that teachers have moderate to high levels of stress (e.g., Harris, 1999).

The data was also analyzed to find out the mean scores of teachers on the subscales of TSI-Urdu. These subscales show the sources and manifestations of teacher stress. The analysis of data revealed that on TSI-Urdu teachers have obtained highest mean scores on work related stressors and professional distress, respectively. On TJPS, the high mean scores were displayed on the subscale discipline and regularity. The high

scores on personal efficacy (PE), the subscale of TES was also shown. From these results we may guess about the tendency of scores on different scales.

In this tryout study, our objective was to find out the relationship of teacher stress, job performance and teachers' self efficacy. The results indicate that teacher stress has significant negative correlation with job performance and teacher efficacy. These results are in line with previous researches which show that teacher stress affect the performance of teachers negatively (Chance, 1992). Studies also indicate that teacher stress is negatively correlated with self efficacy, which ultimately affect the job performance of teachers (Bandura, 1997; Schwarzer, 1999).

In regard to relationship of job related and demographic variables with teacher stress, it was found that teachers from three cities i.e., Islamabad, Rawalpindi, and Chakwal were significantly different for their scores on TSI-Urdu. The results indicated that teachers from Islamabad showed high mean scores as compared to other cities. The data was also analyzed on the basis of school systems of teachers. The results revealed that teachers from government schools showed more stress as compared to teachers from private schools. These results are consistent with a recently conducted research (i.e., Pervez & Hanif, 2003).

The results also indicated significant difference between married and unmarried teachers on their scores on TSI-Urdu. Married teachers show more stress as compared to unmarried teachers. It is our general observation that married teachers have to perform a lot of responsibilities along with their jobs. This observation has also been supported through some empirical studies that roles at family can interface with work and can result stress (Pearlin & Turner, 1987). It was also found that teachers from nuclear families have more stress. These results suggest that in our society responsibilities of a working women are shared within a joint family system such as child care may be shared by the grandmother at home and it may support married working women as

compared to those working women who live in nuclear family system. These teachers may have more stress due to work – home interface.

The correlation coefficient was also computed to see the relationship of teacher stress, job performance and teacher self efficacy. It was found that number of family members have non-significant correlation with teacher stress, job performance and teacher efficacy. Other variables i.e., age, job experience, monthly income and number of students have significant positive correlation with teacher stress and as well job performance and teacher efficacy. The data was also analyzed to see the differences on teachers' scores on TJPS and TES with regard to job related and demographic variables. The ANOVA and t-test were computed. All the results were non significant it may be due to small sample size. So it was assumed that differences would be find out in the main study where sample size is relatively large.

From the results of pilot study we can assume that our scales are enough reliable and valid to explore the prevalence of teacher stress and its relationship with other variables. We would be able to interpret our results more confidently in the main study that had been conducted with a larger sample.

Part III (Main Study)

Method

The part III is comprised of main study. This study was carried out with two independent samples i.e., teachers, and students, to find out the objectives of present research.

Sample I

A sample of 330 women school teachers from the randomly selected Government and Private secondary schools of Chakwal, Rawalpindi and Islamabad was selected. The criteria for the selection of teachers were minimum job experience of one year. The mean age of the teachers was 37 and minimum job experience was one year.

Sample II

Sample II of the present research was comprised of 990 girl students of sample I. They were randomly selected from 9th and 10th classes. Three students were selected to evaluate each teacher.

Instruments

1. Teacher Stress Inventory (TSI-Urdu)

Teacher Stress Inventory (TSI-Urdu) was comprised of 49 items pertaining to 10 subscales of teacher stress (see Appendix M). The five subscales was included sources of stress i.e., time management, work-related stressors, professional distress, discipline and motivation and professional investment, and five subscales were comprised of

manifestations of stress i.e., emotional manifestations, fatigue manifestations, cardiovascular manifestations, gastronomical manifestations and behavioral manifestations.

The responses of the subjects were recorded on a five point rating scale with response categories of "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)", "mostly (زیادہ تر), and "always (ہمیشہ)". The scores assigned to these categories ranged fro 1 to 5. The scores of the subjects were determined by the means of the total and subscales of TSI-Urdu. The cut off scores, determined on the basis of percentile ranks, were 2.39 and below as low levels of stress, 2.87 and above as high levels of stress and scores ranging between 2.40 to 2.86 as moderate levels of stress.

2. Teachers Job Performance Scale (TJPS)

Teachers Job Performance Scale (TJPS) was comprised of 25 items with five point rating scale, pertaining to four empirically determined categories of teacher's job performance (see Appendix N). These categories were Teaching Skills (item nos. 1 to 6), Management Skills (item nos. 7 to 12) , Discipline and Regularity (item nos. item nos. 13 to 18), and Interpersonal Skills (item nos. 19 to 25). The response categories were "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)", "mostly (زیادہ تر), and "always (ہمیشہ)". The scores assigned to these categories ranged from 1 to 5. The cut off scores for the scale was determined on the basis of percentile ranks analysis. The scores 85 and below was determined as the indicative of poor job performance, 95 and above as excellent job performance and scores ranging from 86 to 94 as indicative of good job performance.

3. Teacher Efficacy Scale

Teacher Efficacy Scale adapted by Ahmed (2000) and originally developed by Gibson and Dembo (1984), was modified for the present research purpose (see Appendix K). This scale was comprised 16 items with two independent categories i.e., Teaching efficacy (item Nos. 1, 4, 6, 7, 8, 12, 13, 15) and personal efficacy (item Nos. 2, 3, 5, 9, 10, 11, 14, 16). This was four point rating scale i.e., "mostly agree (کافی متفق)", "agree (متفق)", "disagree (غیر متفق)", and "mostly disagree (کافی غیر متفق). The scores assigned to these rating scales were 1, 2, 3, 4 for teaching efficacy and Vis versa 4, 3, 2, 1 for teaching efficacy. The scores of a subject was sum of the scores on each item for total scale and subscales. The average score was taken to determine the low efficacy and high efficacy of subjects.

4. Personal and Demographic information sheet

A form was developed for teachers in order to seek personal information's like age, job experience, monthly income, number of students, number of family members, school system i.e., Government vs. Private, family system i.e., Joint vs Nuclear (see Appendix L).

Procedure

The data for the main study was collected from randomly selected Government and Private Secondary Schools of three cities i.e., Chakwal, Rawalpindi and Islamabad. This process was completed in two steps. The data was individually collected from two independent samples. Teachers were approached at their schools.

Step I

In the first step of main study data was collected from a sample of 330 women school teachers of Government and Private schools of Chakwal, Rawalpindi and Islamabad. Two Scales, Teacher stress Inventory (TSI-Urdu) and Teacher Efficacy Scale (TES) were administered one after another on this sample. Before administering the each Questionnaire they were told about the objectives of study and instructions were given. They were assured that information collected by them would be confidential and used only for research purpose. Then they were asked to read the general instructions given on the scale.

Firstly, they were given TSI-Urdu, where each item was to respond on five point scale having categories "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)", "mostly (زیادہ تر), and "always (ہمیشہ)" (see Appendix M). After the subjects completed TSI-Urdu, they were given some rest and then other scale Teacher Efficacy Scale (TES) was administered to them. Items on this scale were to respond on four point rating scale "mostly agree (کافی متفق)", "agree (متفق)", "disagree (غیر متفق)", and "mostly disagree (کافی غیر متفق).

Then the subjects were given personal and demographic information sheet to get information about some selected variables i.e., age, job experience, monthly income, family system, marital status, number of family members, number of students etc.

Step II

In the next step of main study, data was collected from a sample of 990 girl students of 9th and 10th classes. The Teachers Job Performance Scale (TJPS) was administered to them. Before administering scale they were assured that there responses

would be kept confidential and there identities will not be disclosed. They were asked to rate the selected teachers on job performance measure. Each selected teacher was to evaluate by three students independently. The response categories of scale were "never (کبھی نہیں)", "sometimes (کبھی کبھار)", "often (اکثر)", "mostly (زیادہ تر), and "always (ہمیشہ)". The students were asked to evaluate their teachers' job performance on these rating scales.

RESULTS

RESULTS

The main study was carried out with two independent samples. Sample I was consisted of 330 women school teachers (for demographic characteristics of sample, see Appendix O), and sample II was consisted of 990 girl students of the same teachers. In order to check the hypothesis of study various statistical analysis were carried out. The psychometric properties of the scales used in main study were determined in pilot study, to strengthen the results the item analysis and reliability were again computed for the main sample.

To determine the stress scores on TSI-Urdu mean scores for total and all the subscales were computed. The range of obtained mean scores is 1.65 to 3.75. The cut off scores were determined to categorize the levels of stress i.e., mild, moderate and high through percentile analysis. The cut of scores were also determined for TJPS and TES. The cut off points for TSI-Urdu were 2.39 and below (mild), above 2.87 (high), 2.40 – 2.86 (moderate). For TJPS, the cut off scores were as 85 and below (poor performance), above 95 (excellent performance) and scores ranging between 86 – 94 (average performance). For TES average score was taken as cut off score i.e., 47. 96. the scores above 47.96 was taken as high teacher self efficacy and below was taken as the indicator of low teacher self efficacy.

Mean scores and standard deviations of all the subscales and as well as total TSI-Urdu, TJPS and TES were computed. Moreover the mean scores and standard deviations were also computed for sources of stress and manifestations of stress separately. The t-test and one way analysis of variance were computed to see the differences between government and private school teachers, and to see the differences according to different levels of stress and some demographic variables. The correlation matrix was computed to see the relationship of three scales and their subscales.

Co-relational analysis were done to see the relationship of teacher stress, job performance and teacher self efficacy with demographic variables. Moderated Multiple Regression analysis was computed to determine the role of teacher self efficacy in the relationship of teacher stress and job performance.

Table 28

Alpha Reliability Coefficients of total and subscales of TSI- Urdu (N = 330)

	Subscales	No. of Items	Alpha Coefficient
I.	Time Management	8	.64
II.	Work-Related Stressors	6	.65
III.	Professional Distress	5	.60
IV.	Discipline and Motivation	6	.66
V.	Professional Investment	4	.63
VI.	Emotional Manifestations	5	.70
VII.	Fatigue Manifestations	5	.71
VIII.	Cardiovascular Manifestations	3	.81
IX.	Gastronomical Manifestations	3	.72
X.	Behavioral Manifestations	4	.28
	Total	49	.80

The data of the main study was also analyzed to determine the reliability of all subscales of TSI-Urdu. Table 28 indicates a highly significant reliability for TSI-Urdu i.e. an alpha coefficient of .80 that is significant at .01. The table also indicates significant reliability coefficient for sub scale of TSI-Urdu that ranges from .28 to .77. All the coefficients are significant at .01 and .05 level of significance.

Table 29

Interscale Correlations of TSI-Urdu (N = 330)

	Subscales	I	II	III	IV	V	VI	VII	VIII	IX	X
I.	Time Management										
II.	Work-Related Stressors	.45**									
III.	Professional Distress	.12*	.15**								
IV.	Discipline and Motivation	.24**	.21**	.25**							
V.	Professional Investment	.21**	-.18*	.39**	.29**						
VI.	Emotional Manifestations	.18*	-.24**	.18*	.25**	.45**					
VII.	Fatigue Manifestations	.18*	.15*	.17*	.21**	.34**	.52**				
VIII.	Cardiovascular Manifestations	.16*	.14*	-.17*	.25**	.18*	.19**	.30**			
IX.	Gastronomical Manifestations	.15*	-.24**	-.28**	.16*	.14*	.16*	.19**	.32**		
X.	Behavioral Manifestations	.16*	.18*	.19**	.16*	.16*	.17*	.18*	.24**	.33**	
	Total	.44**	.36**	.35**	.51**	.51**	.49**	.53**	.46**	.44**	.36**

Table 29 indicates the inter correlations of TSI- Urdu and its sub scales. The results show that all the scales have positive significant correlations with total sore of TSI-Urdu. The highest correlation is found between fatigue manifestations and TSI-Urdu ($r = .53$, $p < .01$). For the sub scales, some sub scales are negatively correlated with each other. The subscale work related stressors is negatively correlated with professional investment ($r = -.18$, $p < .05$), emotional manifestation ($r = -.24$, $p < .05$), gastronomical manifestations ($r = -.24$, $p < .05$), and professional distress are negatively correlated with cardiovascular manifestations ($r = -.17$, $p < .05$) and gastronomical

manifestations (r = -.28, p < .01). Although the correlation are moderate but all the correlations are significant at .05 and .01 level.

Table 30

Item total Correlations of TSI-Urdu (N =330)

Items	Correlations	Items	Correlations
I	.21**	26	.41**
2	.28**	27	.39**
3	.34**	28	.39**
4	.35**	29	.31**
5	.41**	30	.34**
6	.26**	31	.42**
7	.45**	32	.41**
8	.21**	33	.38**
9	.43**	34	.35**
10	.38**	35	.26**
11	.16**	36	.41**
12	.29**	37	.42**
13	.42**	38	.41**
14	.56**	39	.35**
15	.37**	40	.39**
16	.32**	41	.37**
17	.25**	42	.41**
18	.33**	43	.30**
19	.33**	44	.30**
20	.37**	45	.45**
21	.42**	46	.37**
22	.36**	47	.28**
23	.41**	48	.25**
24	.34**	49	.13*
25	.27**		

**$p<.01$

Table 30 indicates item total correlations of TSI-Urdu. The results show that all the items are highly significant with total scores of TSI-Urdu.

The data was also analyzed to determine the internal consistency of TJPS and its subscales. Alpha coefficients, inter-scale correlations and item total correlations were computed for TJPS.

Table 31

Alpha reliability coefficient of TJPS (N = 990)

	Subscales	No. of items	Alpha Coefficient
I	Teaching Skills	6	.56
II	Management Skills	5	.58
III	Discipline and Regularity	7	.51
IV	Interpersonal Skills	7	.50
	Total	25	.71

Table 31 shows the internal consistency TJPS. It indicates the alpha coefficient of .71 that is significant at .01 level of significance. For the subscale of TJPS, the alpha coefficients are .56, .54, .51 and .51 respectively. All the sub scales are significant at alpha level of .01.

Table 32

Interscale Correlations of TJPS (N = 990)

Subscales		I	II	III	IV
1.	Teaching skills				
2.	Management skills	.23*			
3.	Interpersonal skills	.34**	.17*		
4.	Discipline and regularity	.27**	.25**	.37**	
	Total	.65**	.51**	.58**	.57**

$^{**}p < .01$

Table 32 shows that TJPS and its subscales are positively correlated with each other. The correlations are significant at .01 and .05 level of significance. The highest correlation is found between TJPS and its subscale teaching skills ($r = .65, p < .01$).

Table 33

Item total correlation of TJPS (N = 990)

Items	Correlations	Items	Correlations
1	.41**	14	.36**
2	.32**	15	.43**
3	.46**	16	.30**
4	.27**	17	.33**
5	.38**	18	.31**
6	.41**	19	.38**
7	.41**	20	.41**
8	.38**	21	.41**
9	.31**	22	.29**
10	.45**	23	.30**
11	.31**	24	.28**
12	.30**	25	.32**
13	.33**		

**p< .01

Table 33 indicates item total correlation for TJPS. The results show that all the items are positively correlated with total scores. All the correlations are significant at .01 alpha levels.

Table 34

Alpha reliability coefficient of TES (N =330)

Scales	No. of items	Alpha Coefficients
Personal Efficacy	8	.61
Teaching Efficacy	8	.81
Total	16	.72

Table 34 shows the reliability analysis of TES. The results indicate alpha coefficient of .71 for total and for subscales (PE and TE), the alpha coefficients are .61 and .81 respectively. All the coefficients are significant at alpha level of .01.

Table 35

Item total correlation of TES (N = 330)

Items	Correlations	Items	Correlations
1	.22**	9	.51**
2	.57**	10	.14*
3	.61**	11	.66**
4	.23**	12	.27**
5	.77**	13	.25**
6	.19**	14	.64**
7	.27**	15	.67**
8	.18*	16	.54**

Table 35 indicates item total correlations for TES. The results in table show that all the items have significant correlations with the total scores.

Table 36

Means and standard deviations of TSI-Urdu and its subscales (N = 330)

Subscales	No. of items	*M*	*SD*
SOURCES OF STRESS			
I. Time management	8	3.04	.65
II. Work-related stressors	6	3.31	.73
III. Professional distress	5	3.21	.81
IV. Discipline and motivation	6	3.02	.75
V. Professional investment	4	2.42	.79
MANIFESTATIONS OF STRESS			
VI .Emotional manifestations	5	2.22	.74
VII. Fatigued manifestations	5	2.43	.79
VIII .Cardio- manifestations	3	2.09	.98
IX. Gastro- manifestations	3	1.81	.83
X. Behavioral manifestations	4	2.07	.62
TOTAL TSI-Urdu	49	2.63	.39

Table 36 indicates the mean scores and standard deviations of TSI-Urdu. It shows that the mean scores of total scale are 2.63 (*SD* = .39) that fall in the category of moderate stress level. For subscales the range of mean scores is 1.81 (*SD* = .83), to 3.31 (*SD* = .65), whereas the mean scores for the subscales indicating sources of stress is 3.03 (*SD* = .45) and manifestations of stress is 2.23 (*SD* = .52). the results also indicate that the highest mean scores falls on the subscale work related stressors (*M* = 3.31, *SD* = .73) and second highest scores fall on subscale professional distress (*M* = 3.21, *SD* = .81). The lowest score is on the subscale gastronomical manifestations (*M* = 1.81, *SD* = .83). Table also indicates that mean scores for the subscales consisting sources of stress are high as compared to manifestations of stress.

Table 37

Means and standard deviations of TJPS and its subscales (N = 330)

Scales	No. of items	*M*	*SD*
Teaching Skills	6	21.95	3.56
Management Skills	5	16.30	3.55
Discipline and regularity	7	29.28	3.29
Interpersonal Skills	7	25.74	3.11
Total	25	92.31	8.57

The results in table 37 indicate that mean scores for TJPS are 92.31 *(SD* = 8.57) that fall in the category of average performance of teachers. For the subscales, there are highest scores on discipline and regularity (*M*= 29.28, *SD* = 3.29), then there are interpersonal skills *(M*= 25.74.28, *SD* = 3.11), teaching skills *(M= 21.95, SD = 3.56),* and lowest scores fall on the subscale management skills *(M*= 16.30, *SD* = 3.55).

Table 38

Means and standard deviations of TES and its subscales (N = 330)

Scales	No. of items	M	SD
Personal Efficacy	8	28.07	2.60
Teaching Efficacy	8	19.89	5.48
Total	16	47.96	6.21

Table 38 shows means and standard deviation for TES and its subscales. The results indicate that mean scores on total TES is 47.96 *(SD* = 6.21), for Personal Efficacy *M* = 28.07, *SD* = 2.60 and Teaching Efficacy *M* = 19.89, *SD* = 5.48. The results indicate that scores on personal efficacy are high as compared to teaching efficacy.

Table 39

Frequencies and percentages on levels of stress for teachers score on TSI (N = 330)

Levels of stress	Frequencies	Percentages
Mild stress	48	14.5 %
Moderate stress	229	69.4 %
High stress	53	16.1 %

The results in Table 39 indicate three categories of stress, their frequencies and percentages. It shows that only 14.5 % of women teachers fall in the category of mild stress. The rest of the sample falls in moderate to high levels of stress. The results also indicate that more number of teachers falls in the category of moderate levels of stress i.e., 69.4 % and in the high stress the percentages are 16.1%.

The correlations were also computed between the subscales of measures. For this purpose correlations of the subscales of TSI-Urdu were computed for the subscales of TJPS and TES separately (Table 40 and Table 41).

Table 40

Correlation of TSI-Urdu with TJPS and TES

Scales	Correlations with TSI-Urdu
TJPS	-.38**
TES	-.43**

**$p < .01$

Table 40 indicates that both scales have significant negative correlation with TSI-Urdu. The correlation is found between TSI-Urdu and TJPS ($r = -.38, p < .01$) and between TSI-Urdu and TES ($r = -.43, p < .01$).

Table 41

Correlation of TJPS and TES

Scales	Correlation
TJPS	
	.76**
TES	

**$p < .01$

The result in Table 41 indicates that there is significant positive correlation between TJPS and TES i.e., $r = .76$, $p < .01$.

Table 42

Correlations of the subscales of TSI-Urdu and TJPS

Subscales	TS	MS	DR	IS	TJPS TOTAL
Time Management	-.15*	.36**	-.14*	-.42**	-.43**
Work-Related Stressors	-.18*	.17*	-.18*	.16*	-.17*
Professional Distress	.45**	-.54**	.61**	.51**	-.24**
Discipline and Motivation	-.44**	.19**	.24**	.39**	-.16*
Professional Investment	.31**	.18*	.17*	-.19**	-.32**
Emotional Manifestations	.17*	.19**	.38**	.40**	-.17*
Fatigue Manifestations	.17*	.14*	-.18*	-.18*	-.23**
Cardiovascular Manifestations	.16*	.44**	.19**	.32**	-.26**
Gastronomical Manifestations	.40**	.19**	.15*	.18*	-.16*
Behavioral Manifestations	-.18*	-.18*	-.17*	.17*	-.16*
Total TSI-Urdu	-.71**	-.18*	-.47**	-.59**	-.38**

*$p < .05$ **$p < .01$

Table 42 indicates the correlations of the subscales of TSI-Urdu and TJPS. The results show that there are negative correlations between TSI-Urdu and all the subscales

of TJPS. The highest correlation is found between TSI-Urdu and subscale Teaching Skills ($r = -.71$, $p < .01$). The correlations between the subscales of TSI-Urdu and TJPS total scores are also negative. The correlations for the subscales of TSI-Urdu and the subscales of TJPS are different, some have positive and other have negative correlations but all the correlations are significant. The highest positive correlation is found between professional distress and discipline and regularity ($r = .61$, $p < .01$), and negative correlation is found between professional distress and management skills ($r = -.54$, $p < .01$).

Table 43

Correlations of subscales of TSI-Urdu and TES

Subscales	PE	TE	TES TOTAL
Time Management	.32**	-.19**	-.16*
Work-Related Stressors	-.48**	-.28**	-.28**
Professional Distress	.28**	-.31**	-.16*
Discipline and Motivation	.16*	.14*	-.15*
Professional Investment	.23**	.18*	.19**
Emotional Manifestations	-.16*	.13*	.14*
Fatigue Manifestations	-.13*	.14*	.15*
Cardiovascular Manifestations	.12*	.38**	.38**
Gastronomical Manifestations	.16*	.16*	-.17*
Behavioral Manifestations	.19**	-.14*	-.19**
Total	.25**	-.74**	-.43**

*$p < .05$ **$p < .01$

The results in Table 43 indicate that the correlations between total scores of TSI-Urdu and the subscale Teaching Efficacy is -.74 that is highly significant at .01 alpha level and for Personal Efficacy the correlation is .25 that is also significant. The

correlations between the subscales of TSI-Urdu and the subscales of TES are different i.e., negative and positive. All the correlations are significant.

Table 44

Correlations of subscales of TJPS and TES

Subscales	Personal Efficacy	Teaching Efficacy	TOTAL
Teaching skills	.18**	.31**	.43**
Management skills	.11	.40**	.31**
Discipline and regularity	.12	.42**	.50**
Interpersonal skills	.20**	.52**	.62**
Total	.36**	.64**	.76**

Table 44 shows the correlations of TJPS and its subscales with TES and its subscales. The results show that teacher efficacy and its subscale, teaching efficacy has significant positive correlation with all the subscales of teachers' job performance scale. The subscale personal efficacy show significant positive correlation with total and subscales except two subscales i.e., management skills and discipline and regularity that have non-significant results.

Moderated Multiple Regression Analysis

To find out the moderator role of teacher self efficacy in the relationship between teacher stress and job performance moderated multiple regression analysis has been computed.

Table 45

Moderated Multiple Regression

Model	*B*	*SE*	*β*	*t*
Constant				
Teacher stress	-1.763	.837	-.112	-2.106*
Teachers job performance	.211	.359	.132	1.39*
Teacher stress x Teacher Job Performance	.190	.039	.262	4.934**

*$p < .05$, **$p < .01$

$R^2 = .088$, $\Delta R^2 = .083$, $F = 15.856$**

The results in Table 45 show R^2 (% of the dependant explained by the independent) 8.8 % of the variance. The change in R^2 is .083 with $F = 15.856$ ($df = 1, 327$) $p < .01$. The effect of independent variable is therefore, significant. The beta for model 2 is .262 with $t = 4.934$, $p < .01$. It sows that the moderator variable has significant effect. It shows significant difference of slope.

Table 46

Comparison of means, standard deviations, and t-values of teacher's scores on TSI, TJP, and TES by their Job Experience (N = 330)

	Group 1 (Up to 5 yrs) ($n = 170$)		Group 2 (Above 5 yrs) ($n = 160$)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.35	.32	2.80	.294	13.10	.000**
TJP	94.34	9.36	95.06	9.15	.709	.479
TES	48.27	6.27	47.45	6.31	1.18	.238

**$p < .01$

The results in Table 46 indicate that there is significant difference between less job experienced and more job experienced school teachers on their scores on TSI (t = -

13.10, $df = 328$, $p < .01$) and non significant difference on their scores on TJP and TES. The mean scores show that school teachers with more job experience have more stress.

Table 47

Comparison of means, standard deviations, and t-values of teacher's scores on TSI, TJP, and TES by their age. (N = 330)

	Group 1 (Up to 37 Yrs) ($n = 195$)		Group 2 (above 37 Yrs) ($n = 135$)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.36	.305	2.81	.305	-13.22	.000**
TJP	94.42	9.24	95.01	9.28	-.573	.567
TES	47.91	6.41	47.85	6.16	.527	.756

**$p < .01$

Table 47 shows that teachers with more age are significantly different for their scores on TSI ($t = -13.22$, $df = 328$, $p < .01$), but there is a non-significant difference on their scores on TJPS and TES between two groups.

Table 48

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by Marital Status (N = 330)

	Married ($n = 149$)		Unmarried ($n = 181$)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.62	.359	2.51	.387	3.33	.001**
TJP	93.50	9.57	95.71	3.33	2.14	.033*
TES	47.18	6.55	48.45	6.03	1.83	.068

*$p < .05$ **$p < .01$

The results in table 48 indicate that teachers are significantly different on their scores on TSI (t = - 3.33, df = 328, p< .01) and TJP (t = -2.14, df =328, p < .05) by their Marital Status. And non significant on their scores on TES (t = -1.83, df ,328, p> .05).

Table 49

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by number of students (N = 330)

	Group 1 Up to 90 (n = 154)		Group 2 Above 90 (n = 176)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.51	.363	2.68	.375	1.73	.003**
TJP	95.73	8.73	93.22	8.01	1.56	.012*
TES	49.17	6.07	47.24	6.49	2.55	.011*

*p< .05 **p< .01

The results in Table 49 indicate that teachers by number of students have significant difference on TES (t = 2.55, df = 328 , p< .01) and non significant difference on TSI (t = - 1. 63, df = 328, p > .05) and TJP (t = 1.36, df = 328, p>.05).

Table 50

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by monthly income (N = 330)

	Group 1 Up to Rs.5000/- (n = 174)		Group 2 Above Rs.5000/- (n = 156)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.43	.375	2.69	.332	-6.64	.000**
TJP	93.23	9.30	96.31	8.95	-3.06	.002**
TES	47.37	6.44	48.44	6.09	-1.54	.124

*p< .05 **p< .01

Table 50 indicate that there is significant difference between teachers with low income and more in come on their scores on TSI (t = -6,64, df = 328, $p < .01$) and TJP (t = - 3.06, df = 328, $p < .01$) and non significant difference on TES (t = -1.54, df =328, $p > .05$).

Table 51

Comparison of means, standard deviations, and t-values of government and private school teachers on their scores on TSI, TJP, and TES (N = 330)

	Government (n = 166)		Private (n = 164)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.63	.383	2.50	.360	3.35	.001**
TJP	92.89	9.46	96.51	8.71	-3.61	.000**
TES	44.11	5.57	51.71	4.42	-13.66	.000**

**$p < .01$

Table 51 shows that Government and Private school teachers have significant differences on their scores on TSI (t = 3.35, df =328, $p < .001$), TJP (t = -3.61, df = 328, $p < .000$) and TES (t = -13.66, df =328, $p < .000$). The mean scores indicate that Government teachers have more stress poor job performance and low self efficacy and Private School teachers have low stress, good job performed and high efficacy.

Table 52

Comparison of means, standard deviations, and t-values of government and private school teachers on their scores on Sources and Manifestations of Stress(N = 330)

	Subscales	Government (n = 166)		Private (n = 164)			
		M	*SD*	*M*	*SD*	*t*	*p*
SOURCES OF STRESS							
I	Time Management	3.21	.583	2.86	.679	5.12	.000**
II	Work-Related Stressors	3.54	.702	3.04	.672	6.68	.000**
III	Professional Distress	3.22	.805	3.15	.825	.785	.433
IV	Discipline and Motivation	3.11	.770	2.93	.711	2.26	.024*
V	Professional Investment	2.35	.809	2.48	.767	-1.45	.147
	Total	3.17	.41	2.89	.45	5.70	.000
MANIFESTATIONS OF STRESS							
VI	Emotional Manifestations	2.19	.731	2.26	.748	-.942	.347
VII	Fatigue Manifestations	2.38	.794	2.49	.788	-1.27	.205
VIII	Cardiovascular Manifestations	2.14	.946	2.04	1.01	.941	.348
IX	Gastronomical Manifestations	1.94	.864	1.69	.785	2.76	.006**
X	Behavioral Manifestations	2.17	.638	1.96	.588	3.21	.001**
	Total	2.33	.38	2.51	.36	5.88	.000
	TSI Total	2.63	.383	2.49	.360	3.35	.001**

*p< .05 **p< .01

Table 52 shows the mean differences of Govt. and private school teachers on their scores on TSI. The results indicate that Govt. school teachers have significantly difference from private school teachers on their total scores on TSI (t = 3.35, df =328, p < .01).

The Table shows that government and private school teachers have significant differences on sources of stress i.e., time management; work related stressors, Discipline and motivation. And have significant differences on manifestation of stress i.e., Gastronomical manifestation and behavioral manifestations. The differences on other sources and manifestation are non significant.

Table 53

Means, standard deviations and t-values of the scores on teachers job performance scale and its subscales (N = 990)

	Government (*n* = 495)		Private (*n* = 495)			
	M	*SD*	*M*	*SD*	*t*	*p*
Teaching Skills	21.22	3.59	22.69	3.40	-3.83	.000**
Management Skills	16.23	3.35	16.27	3.75	-.36	.719
Discipline and regularity	28.85	3.28	29.71	3.26	-.2.38	.018*
Interpersonal Skills	25.51	3.09	25.97	3.13	-1.33	.185
Total	90.80	8.09	93.80	8.80	-3.22	.001**

*p< .05 **p< .01

Table 53 indicates that government and private school teachers have significant differences on TJPS total scale and its subscales i.e., Teaching Skills and Discipline and Regularity. Non significant results have been shown on other subscales.

Table 54

Means, standard deviations and t-values of the scores on teacher efficacy scale and its subscales (N = 330)

	Government (n = 166)		Private (n = 164)			
	M	*SD*	*M*	*SD*	*t*	*p*
Teaching Efficacy	44.29	5.51	51.68	4.42	-17.67	.000**
Personal Efficacy	28.19	2.76	27.94	2.42	.88	.377
Total	16.09	4.45	23.74	3.31	-13.43	.000**

**$p < .01$

The results in Table 54 show that government and private school teachers are significantly different on Teacher self efficacy (t = -13.43, p < .01) and its subscale Teaching Efficacy (t = -17.67, p < .001). The mean scores of private school teachers are high on these scales. The difference on Personal Efficacy subscale is non significant.

Table 55

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by Family System (N = 330)

	Joint Family (n = 147)		Nuclear Family (n = 183)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.52	.390	2.59	.364	1.78	.07
TJP	96.08	9.31	92.95	8.91	3.08	.002*
TES	48.15	6.12	47.53	6.51	.900	.369

*$p < .05$

Table 55 indicates that results by family system on teachers scores on TJP (t = -3.08, df = 328, p < .01) and non significant on TSI (t = -1.78, df =328, p> .05) and TES (t = -.900, df = 328, p > .05).

Table 56

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by teaching hours (N = 330)

	Group 1 Up to 30hrs/week (n = 113)		Group 2 Above 30hrs/week (n = 217)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.32	.463	2.98	.275	2.73	.003**
TJP	98.22	2.01	90.73	8.73	2.56	.012*
TES	49.24	4.49	41.17	8.07	3.55	.001**

**p< .01 *p< .05

Table 56 indicate significant difference between the scores of teachers who teach upto 30 hrs/week and those who teach above 30 hrs/ week. The results show that teachers who teach more hours per week display more stress ($t = 2.73, p < .01$), low job performance ($t = 2.56, p < .05$) and low self efficacy ($t = 3.55, p < .01$).

Table 57

Mean and Standard Deviations of school teachers with different sources of transportations on their scores on TSI, TJP, and TES

	Group I Public Transport (n = 197)		Group II School Transport (n = 48)		Group III Personal Transport (n = 85)	
	M	*SD*	*M*	*SD*	*M*	*SD*
TSI	2.96	.20	2.42	.40	2.74	.38
TJPS	82.45	15.61	96.17	7.65	92.48	7.65
TES	41.66	5.85	46.94	6.17	48.85	6.34

Table 57 indicates differences on the mean scores on TSI ,TJPS and TES between groups by their sources of transportations.

Table 58

One Way Analysis of Variance (ANOVA) of teachers with different sources of transportations for their scores on TSI-Urdu

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	820.858	2	415.429		
Within Groups	12762.839	327	36.339	12.432	.001**
Total	12713.697	329			

The results in Table 58 indicate that teachers with different sources of transportations have significant differences on their scores on TSI.

Table 59

One Way Analysis of Variance (ANOVA) of teachers with different sources of transportations for their scores on TJPS

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	830.858	2	415.429		
Within Groups	9782.839	327	49.339	11.432	.012*
Total	10713.543	329			

The results in Table 59 indicate that teachers with different sources of transportations have significant differences on their scores on TJPS.

Table 60

One Way Analysis of Variance (ANOVA) of teachers with different sources of transportations for their scores on TES

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	265.796	2	88.59		
Within Groups	12166.68	328	37.785	2.345	.02*
Total	12432.482	330			

*$p < .05$

The results in Table 60 indicate that teachers with different sources of transportations have significant differences on their scores on TES.

Table 61

Comparison of means, standard deviations, and t-values of teachers on their scores on TSI, TJP, and TES by family members(N = 330)

	Group 1 Up to 5 (n = 148)		Group 2 Above 5 (n = 182)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.52	.411	2.61	.345	1.75	.081
TJP	93.41	8.17	95.76	9.94	2.34	.020*
TES	47.30	6.46	48.35	6.13	1.53	.126

*$p < .05$

Table 61 shows the mean difference by number of family members on teacher's scores on TSI, TJP and TES . The results indicate that there is significant mean difference on TJP (t = -2.34, df = 328, p<.05) and non significant mean difference on TSI(t = -1.75, df = 328, p >.05) and TES (t = - 1.53 , df .= 328, p> .05).

Table 62

Comparison of means, standard deviations, and t-values of school teachers with different education on their scores on TSI, TJP, and TES

	Group I BA/BSc ($n = 122$)		Group II MA/MSc ($n = 208$)			
Scales	*M*	*SD*	*M*	*SD*	*t*	*p*
TSI	2.59	.42	2.62	.38	1.405	.161
TJP	92.77	8.34	92.01	8.71	.77	.442
TES	47.598	6.18	48.18	6.23	.831	.407

Table 62 shows the differences on scales by teachers' education. The results indicate non significant differences on TSI, TJPS, and TES between the two groups.

Table 63

Mean and Standard Deviations of school teachers with different training groups on their scores on TSI, TJP, and TES

	Group I No training ($n = 44$)		Group II B.Ed ($n = 44$)		Group III M.Ed ($n = 89$)	
	M	*SD*	*M*	*SD*	*M*	*SD*
TSI	2.76	.20	2.63	.40	2.64	.38
TJPS	92.45	14.61	92.16	8.65	92.48	7.65
TES	41.66	5.85	47.94	6.17	48.85	6.34

Table 63 indicates very slight differences on the mean scores on TSI and TJPS between groups by their professional training. The mean scores on TES are different. The teachers with higher training have more scores.

Table 64

One Way Analysis of Variance (ANOVA) of teachers training for their scores on TSI-Urdu

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	.113	2	3.776		
Within Groups	50.274	328	.156	.242	.867
Total	50.387	330			

The results in Table 64 indicate that teachers with different training groups have non significant differences on their scores on TSI.

Table 65

One Way Analysis of Variance (ANOVA) of teachers training for their scores on TJPS

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	7.39	2	2.46		
Within Groups	23157.94	328	71.91	.03	.991
Total	23165.34	330			

The results in Table 65 indicate that teachers with different training groups have non significant differences on their scores on TJPS.

Table 66

One Way Analysis of Variance (ANOVA) of teachers training for their scores on TES

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	265.796	2	88.59		
Within Groups	12166.68	328	37.785	2.345	.04*
Total	12432.482	330			

*$p < .05$

The results in Table 66 indicate that teachers with different training groups have significant differences on their scores on TES. The teachers with higher training scored high on the scale.

Table 67

Means and standard deviations for teachers' scores on TSI-Urdu from three cities i.e., Islamabad, Rawalpindi and Chakwal

Cities	*n*	*M*	*SD*
Islamabad	110	2.74	.409
Rawalpindi	121	2.61	.393
Chakwal	99	2.62	.358

The mean scores of teachers with different cities are different. High mean scores are displayed on the Islamabad.

Table 68

City-wise One Way Analysis of Variance (ANOVA) for teachers scores on TSI-Urdu

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	1.912	2	.956		
Within Groups	49.385	327	.151	6.331	.002**
Total	51.298	329			

Table 68 shows significant difference in the teachers of Islamabad, Rawalpindi and Chakwal on their total scores on TSI, F (2, 327) = 6.331 $p < .002$.

Table 69

Means and standard deviations for teachers' scores on TJPS from three cities i.e., Islamabad, Rawalpindi and Chakwal

Cities	*M*	*SD*
Islamabad	92.87	7.29
Rawalpindi	95.58	8.41
Chakwal	87.71	7.29

Table 69 shows that teachers from three cities have different mean scores. Teachers from Rawalpindi display high mean scores on TJPS

Table 70

City-wise One Way Analysis of Variance (ANOVA) for teachers scores on TJPS

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	3434.355	2	1717.178		
Within Groups	20751.562	327	63.460	27.059	.000**
Total	24185.917	329			

Table 70 shows significant difference in the teachers of Islamabad, Rawalpindi and Chakwal on their total scores on TJPS, $F(2, 327) = 27.059$ $p < .000$.

Table 71

Means and standard deviations for teachers' scores on TES from three cities i.e., Islamabad, Rawalpindi and Chakwal

Cities	Means	Standard deviations
Islamabad	49.32	5.91
Rawalpindi	48.65	6.24
Chakwal	45.60	5.89

Table 71 shows difference in mean scores of teachers from three cities. The results indicate that teachers from Rawalpindi display high mean scores on TES.

Table 72

City-wise One Way Analysis of Variance (ANOVA) for teachers scores on TES

Sources of Variance	*SS*	*df*	*MS*	*F*	*p*
Between Groups	830.858	2	415.429		
Within Groups	11882.839	327	36.339	11.432	.000**
Total	12713.697	329			

Table 72 shows significant difference in the teachers of Islamabad, Rawalpindi and Chakwal on their total scores on TES, F (2, 327) = 11.432 p < .000.

Table 73

Correlations of TSI-Urdu and its subscales with demographic variables (N = 330)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Time Management	.18**	.19**	.06	.06	-.02
Work-Related Stressors	.26**	.26**	.15**	.13*	.09
Professional Distress	.35**	.34**	.24**	.04	.05
Discipline and Motivation	.46**	.43**	.23**	.13*	.10
Professional Investment	.45**	.41**	.26**	-.01	.03
Emotional Manifestations	.39**	.31**	.21**	.05	.01
Fatigue Manifestations	.36**	.33**	.14*	.08	.06
Cardiovascular Manifestations	.25**	.23**	.15**	.05	.05
Gastronomical Manifestations	.24**	.25**	.15**	.03	.02
Behavioral Manifestations	.23**	.13*	.03	.09	.04
Total	.52**	.48**	.24**	.12*	.07

$*p < .05$, $**p < .01$

Table 73 indicates the correlation of teachers' scores on TSI-Urdu total and its subscales with demographic variables. The correlations are different on different subscales. The correlations of all the variables with total scores on TSI are significant except the variable of number of family members at home that is also not significant on all the subscales of TSI.

Table 74

Correlations of TJPS and its subscales with demographic variables (N = 330)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Teaching Skills	-.13*	.23**	.08	.46**	.16**
Management Skills	.18**	.40**	.13*	.45**	.19**
Discipline and regularity	.03	.22**	.16**	.65**	.08
Interpersonal Skills	-.04	.16**	-.03	.38**	.19**
Total	.15*	.51**	.29**	.71**	.21**

*$p < .05$, **$p < .01$

Table 74 indicates the correlation of teachers' scores on TJPS and its subscales with some demographic variables. The results show that total scores on TJPS has significant positive correlation with age, job experience, monthly income, number of students and number of family members at home. The subscale management skills have positive significant correlation with all demographic variables.

Table 75

Correlations of TES and its subscales with demographic variables (N = 330)

Subscales	Age	Job experience	Monthly income	No. of students	Family members
Teaching Efficacy	.02	-.06	-.05	.09	.04
Personal efficacy	-.05	-.12*	.04	-.36**	.22**
Total	-.04	-.14*	-.03	-.38**	.35**

*$p < .05$, **$p < .01$

Table 75 shows that TES has negative significant correlation with job experience and number of students, and positive significant correlation with family members. The subscale Teaching Efficacy has non significant correlation with all the variables. Personal Efficacy has negative significant correlation with job experience and number of students and significant positive correlation with family members.

DISCUSSION

DISCUSSION

The present research was carried out to explore the phenomenon of teacher stress among women secondary school teachers. The study also focused to find out the moderator role of self efficacy in the relationship of teacher stress and job performance. Another objective was to find out the relationship of some job related and demographic variables of teachers with stress, job performance and teacher self efficacy. The research was conducted in three parts. In part I, three scales were developed and psychometric properties of these scales were determined. To measure the levels and sources of teacher stress, Teacher Stress Inventory, (TSI) by Fimian (1984) was adapted and translated into Urdu. The process of adaptation and translation has been discussed in part I of this research. An indigenous scale to measure the job performance of teachers, Teachers Job Performance Scale (TJPS) was developed through a standardized procedure. The third scale used in this study was Teacher Efficacy Scale (TES) by Ahmad (2000). This scale was indigenously developed and has been used successfully in many researches. This scale was modified through committee approach for the specific purposes of the present research. The psychometric properties of all these scales were determined in the part I of the present research. The empirical data showed that these scales have sufficient reliability and validity and can be used confidently for the research purposes.

Part II of the present research was conducted on a relatively small sample. The objective of this study was pre-testing of the scales developed in part I and to find out the flaws that may interfere in the findings of main study. Part III is comprised of the main study. This part deals with the main objectives of the research. This study was

carried out with a relatively larger sample and with the help of the scales developed and adapted in part I of the present research.

The main objective of this study was to find out the levels and sources of teacher stress among women secondary school teachers. It was hypothesized that women teachers will frequently display high levels of stress. To identify levels of teacher stress percentile scores were computed. The criterion to find out the cut off points was one standard deviation plus and one standard deviation minus the mean score of data. The scores 2.39 and 2.87 were determined as cut off points. These scores fall on 25^{th} and 75^{th} percentiles respectively. The scores up to 25^{th} percentile were considered as low levels of stress, the scores above 75^{th} percentile was considered as high levels of stress, and rest of the scores were considered as moderate levels of stress. The results indicate that frequency of teachers is high within the group of moderate level of stress i.e., 69.4% of teachers show moderate level of stress and rest of them belong to low and high levels of stress (Table 39). The result does not support the hypothesis. This hypothesis was based on the review of literature (e.g., Otto, 1982; Travers & Cooper, 1996 etc.) and general observation that teaching is a highly stressful profession. We should keep in mind that cut off points used in the study are computed just to differentiate different categories of data and these should not be taken as definite and final points. These scores have to be repeatedly validated for various groups of sample. Moreover, there is some literature that may support our findings. It revealed that teachers have moderate level of stress (Chan & Hui, 1995; Cockburn, 1996). Fimian (1984) established the normative data of 3401 school teachers and found that the stress factors experienced by the norm group were at moderate levels of stress. So the norms of TSI that were originally developed are also at moderate level. Our findings depicted that our data is in line with the findings of Fimian (1984). Our results also show that the teacher stress phenomenon is prevailing in our women school teachers.

The data was also analyzed to identify the sources of teacher stress. The mean scores showed that the teachers have scored high on work-related stressors and second highest scores were depicted on professional distress. Work related stressors are referred to work overload and time pressures and professional distress is comprised of those sources related to some professional variables such as lack of progress profession promotion opportunities, inadequate salary etc These results are consistent with other studies (i.e., Laughlin, 1984; Sutherland & Cooper, 1991). The mean scores on all the subscales of TSI-Urdu showed the overall picture of teacher stress phenomenon. It indicated that teachers' scores on sources of stress are comparatively high as manifestations of stress. It shows that prevalence of teacher stress can not be denied.

Another hypothesis of this research was about the relationship of teacher stress, job performance and teacher self efficacy. It was assumed that higher teacher stress will lead towards poor job performance and low teacher self efficacy. The correlation coefficient was calculated between the teacher stress and job performance and teacher stress and self efficacy. The correlation coefficient showed that teacher stress has negative significant correlation with job performance and teacher self-efficacy (Table 40).

The results have supported our hypothesis. These results are consistent with previous researches e.g., Ivancivich and Matteson (1980), Chance (1992), Dickman and Emener (1992). The review of literature reveals that work related stressors in teacher have negatively impacted their job performance. The researches show that the teacher stress may have psychological and social effects and these effects may be expressed in a variety of different ways, poor performance is one result of this complex issue. (Stansfeld et al., 1999; Friedman, 2000). The researches also show that teacher stress is negatively related with sense of self-efficacy. Teacher stress may affect the belief system of teachers about themselves. Low self-efficacy is associated with stress and it

has affected their performance negatively. (Schwarzer, 1999; Cherniss, 1980; Beehr, 1995).

The data was further analyzed to see the correlation of sub-scales of all the three scales. The analyses showed that all the four subscales of TJPS have significant negative correlation with the TSI-Urdu. And all the subscales of TSI-Urdu have also significant negative correlation with TJPS. The correlations of the subscale of TES were found significant with TSI-Urdu and its subscales. Teaching efficacy (TE) has significant negative correlation with TSI-Urdu but personal efficacy (PE) has significant positive correlation with TSI-Urdu. Ahmad (2000) has concluded that there is negative correlation between personal efficacy and teaching efficacy. These findings may be implied to our findings that have suggested that stress has negative relationship with teaching efficacy and positive relationship with personal efficacy. It may therefore, be suggested that teaching efficacy has more contribution in teacher stress as compared to personal efficacy.

The third hypothesis of present study was that the higher teacher self-efficacy would lead toward excellent job performance. The significant positive correlation coefficient (Table 41) has supported our hypothesis. These finding are also consistent with previous researches (Bandura, 1995; Schwarzer, 1999). Bandura (1993) found that high sense of efficacy visualizes success scenarios, they provide guide and support for performance. Strong sense of self-efficacy influences job performance positively. Our results indicate that positive beliefs about oneself can increase the performance of a person. It was also found that all the subscales of TJPS and TES have been significantly positively correlated with each other (Table 44).

The literature review of the relationship of teacher stress, job performance and self efficacy revealed that self efficacy plays role of a moderator in the negative relationship between teacher stress and job performance (Grau, Salanova, & Peiro,

2001). To determined the moderator role of teacher self efficacy in the relationship of teacher stress and job performance, moderated multiple regression analysis was computed. Moderated multiple regression analysis is a form of hierarchical entry of the predictor variables to determine if the relation between a predictor variable and a criterion variable is influenced by a third (moderating) variable (Nunally & Bernstein, 1994). The results showed that there is negative correlation between teacher stress and Job performance and self-efficacy can play role of a moderator in this relationship. The results (Table 45) have supported our hypothesis number four. The findings are consistent with previous researches (Brief & Aldage, 1998; Jex & Bliese, 1999). The results indicated that R^2 (% of the dependant explained by the independent) was 8.8 % of the variance. The change in R^2 was .083 with $F = 15.856$ (df 1, 327) $p < .01$. The effect of independent variable was therefore, significant. The beta for model 2 is .262 with $t = 4.934$, $p < .01$. It sowed that the moderator variable was contributing significant effect. It also showed significant difference of slope.

The above findings may lead to realize the importance of our belief system. Our beliefs are constructed in our existing system. In the context of teaching, this system is interrelated to our educational environments and processes of family socialization. If teachers have positive beliefs about themselves, they can face stressful work environment and can show excellent performance at their schools. So to moderate the negative relationship of stress and performance we should try to restructure our belief system.

In the present research, few hypotheses were formulated to find out the relationship of teacher stress, job performance and self-efficacy with some job related and demographic variables. The literature review has revealed that there are certain individual variables that may contribute to stress, job performance and self efficacy (Antoniou, Polychroni, & Walters, 2000). To find out the relationship of these variables,

t-test, ANOVA and correlation analyses were computed for the different groups of sample to find out these objectives.

Teacher's job experience and age are important factors that may affect levels of stress, job performance and self-efficacy of teachers. It was hypothesized that teachers with more job experience will show more stress, poor job performance and low self-efficacy as compared to less experienced teachers. The data obtained were distributed into two groups according to their job experience. Group-I was comprised of teachers with job experience up to 5 years and Group-II was comprised of teachers with job experience above 5 years. T-test was computed to find out the difference between the two groups. The results show that there is significant difference between two groups on their scores of TSI-Urdu, but non-significant difference were found on TJPS and TES (Table 46). The mean scores showed that teachers with more job experience showed more stress. The slight differences in the mean scores of both groups were also found in their scores on TJPS and TES but these differences were non significant. These results may support the hypothesis partially. The results are not in line with previous researches. As Okebukola and Jegede (1989) has found that teachers with more job experience have less stress as compare to teachers with less experience. The results also indicated that there are not significant differences on TJPS and TES with regard to the job experience of teachers.

Another hypothesis was formulated about the age of teachers. The review of literature also revealed that age contributes in the degree of stress (Okebukola and Jegede, 1989). The results of our research showed that teachers have significant differences in their scores on TSI with regard to their age but non-significant differences were found on TJPS and TES. Data was analyzed by dividing teachers into two groups. The teachers with more age showed high levels of stress as compared to teachers with less age. It is our general observation that as people grow older they feel more pressures

in their surroundings and especially women become more stressed in older age. That may be the reason that older women teachers experience more stress as compared to the younger teachers. Another reality that belongs to our educational system is that the chances and opportunities of the professional advancement and personal growth for our teachers are less, so when teachers are young they show enthusiasm for their jobs and they face all the stressful conditions with strong stamina but as they grow older their motivation becomes low and they find it difficult to cope with stressful circumstances. The findings of our study partially supported our hypothesis.

It was also hypothesized that married teachers will display more stress, poor job performance and low self efficacy as compared to unmarried teachers. The findings show that married and unmarried teachers are significantly different on their scores on TSI and TJPS but non-significant differences are found on TES. However, our hypothesis is not fully supported as the mean scores showed that married teachers display high stress, low job performance and low self efficacy. The difference on self efficacy measure was non-significant. We may assume that our hypothesis is supported by our findings. The results are also consistent with some of the previous findings (Antoniou, Polychroni, & Walters, 2000) that showed that marital status has significant contribution to teacher stress and job performance.

The numbers of students in a class is another factor that may lead towards workload of a teacher and ultimately may cause teacher stress. It was assumed that teachers with more number of students in their class will show more stress, poor job performance and low self-efficacy as compared to teachers with less number of students. The results showed significant difference between the teachers with more number of student and teachers with less number of students on the all these three variables, i.e., teacher stress, job performance and self efficacy. The findings suggested that teachers who have more number of students in their classes displayed high levels of

stress, poor job performance and low self efficacy as compared to teachers with less number of students in their classes. These findings are also consistent with previous researches (Pervez & Hanif, 2003; Okebukola & Jegede, 1989). The current data displayed that in our schools there is great disparity with regard to number of students in one class. The number of students ranges between 28 to 180 in one class. In some schools the number of students were far more higher than number of teachers. One teacher has to teach such a big class for the whole day in working hours. So the number of students in a class may be suggested as the significant factor in job stress of our school teachers.

In our educational settings, one significant factor that may contribute to teacher stress phenomenon is the income of teachers. Our teachers lag behind their counterparts doing jobs in other professions, in relation to the salary package along with some other factors as well. In the present research, it was hypothesized that teachers with less monthly income will show more stress, poor job performance and low self efficacy as compared to teachers with more income. The findings indicated the contradictory results. There were significant differences between less income group and more income group of teachers on TSI and TJPS and non significant differences were found on TES. But the mean scores showed that teachers with more income displayed high stress and good performance. These results may be consistent to the results regarding age and job experience of teachers. We have seen that teachers with more job experience and more age showed more stress. It is because of the system that teachers with more job experience get more income due to the regular process of promotion. And experienced teachers will also show good performance.

Within the context of school systems, there are two systems existing in our educational settings i.e., government school systems and private school system. It is a general observation that private sector is providing quality education as compared to

government sector. For quality education private sector provides many facilities and incentives to their teaching staff. The teachers from private sector feel themselves quite privileged. So it was hypothesized that Government School Teachers will display more stress poor job performance and low self efficacy as compared to the teachers of private school system. The results of present study indicated that our hypothesis is fully supported, as there are significant differences between the teachers of government and private schools. The teachers from government schools have shown more stress, poor job performance and low self efficacy as compared to teachers from private schools. The previous researches have shown that government sector organizations experience significantly more stress than those of private sector organization (Jaswin, 1987; Singh, 1987). It was also found in a recent research that teachers from government schools displayed high levels of stress as compared to teachers from private schools.(Pervez & Hanif, 2003).

The data was further analyzed to find out the differences of government and private school teachers on the subscales of all the scales. Significant differences were found with regard to sources and manifestations of teacher stress. Teachers from government schools showed more stress on time management, work related stressors, discipline and motivation, gastronomical manifestations and behavior manifestations. The differences on these scales were significant. The private school teachers showed high mean scores on professional investment, emotional manifestations and fatigue manifestations but the differences were non significant. Pervez and Hanif (2003) have also found that teachers from government and private schools displayed different scores on different subscales of TSI measure. The reason may be that both types of schools have different job environments and different type of pressures that may impact the experience of stress in teachers and they found different stressors within their jobs. It was also found that job performance of teachers from government schools was poor as

compared to private school teachers and there were significant differences on the subscales of teaching skills and discipline and regularity where government teacher displayed poor performance. The result also indicated that teachers from government schools showed low teacher self efficacy as compared to private school teachers. On the subscales differences are significant on teaching efficacy (TE) but non significant on personal efficacy (PE) where mean scores showed high means for teachers from government schools.

The data of present research was also analyzed to explore the effects of some other variables such as family system, teaching hours, means of transportation, qualification and professional training of teachers. For these variables no hypothesis was formulated because we could not find empirical evidence for the relationship of these variables with stress, job performance and self efficacy. However, it was observed during the data collection that these variables have significant importance for our women school teachers. So data was analyzed to explore the empirical evidences.

The finding suggested that teachers from nuclear and joint family system have significant difference on job performance measure. The teachers from nuclear families showed poor performance as compared to teachers from joint family system. These findings may suggest that in nuclear families women teachers have to perform many responsibilities all alone at home and this workload at home may interfere with their performance at job. On the other hand, other members share the responsibilities of teachers from joint families. The differences on stress and self-efficacy measures were found non significant. The mean scores showed slight differences i.e., teachers from nuclear families showed low scores on job performance and self efficacy. It shows the direction of trend of scores.

The results have indicated that teaching hours in a week raised the work load of teachers and this may contribute to stress. It was found that teachers who teach above 30

hours in a week showed high stress, poor performance and low efficacy as compared to those who teach less hours in a week. Another important factor in regard to jobs and especially for working women is transportation. Working women have to face great difficulties in transportation. To move in the society independently is quite a difficult thing for women. When women are at job, they have to be dependent on the male members of their families, if their schools are providing no arrangement of transport. The findings have suggested that teachers who traveled by public transport showed high stress, poor performance and low efficacy as compared to teachers who traveled by school or personal transport. The results showed significant differences. T-test was also computed to find out the differences among teachers in regard to number of family member at home. It was found that more number of family members has significant effect on job performance; however, results are non-significant on stress and efficacy measures.

The results have further indicated that qualification of teachers is not a significant factor to contribute to teacher stress, job performance or self efficacy. Significant contributions have been found with regard to the professional training on the teacher efficacy. It was found that teachers who have high degree of professional training (M. Ed.) showed high self efficacy. These results are in line with previous researches (Jaswin, 1987).

The present research was comprised of the sample from three cities. The reason behind the selection of these cities was to include the sample of teachers from different work environment these were; a cosmopolitan city i.e., Islamabad, a moderate cultural city i.e., Rawalpindi and a small town i.e., Chakwal. The data analysis revealed that there were significant differences between the scores of teachers from these cities on all the three variables i.e., stress, performance and self-efficacy. The findings have suggested that teachers from Islamabad displayed more stress, poor job performance

and high efficacy as compared to other cities. It suggested that when teachers work under cosmopolitan situations, they experienced more stress and as a consequence their performance is poor. At the same time results indicated that teachers from Islamabad have high self efficacy. The reason may be due to the culture of their city that makes them more efficacious.

The correlation coefficient of some job related and demographic variables and TSI, TJPS, TES and its subscales was also computed. The findings in Table 69, 70 and 71 showed significant relationship of all the variables. This relationship showed the contribution of these variables.

On the basis of the findings of the present research it can be concluded that the phenomenon of teacher stress is prevailing in our women secondary school teachers. The level of stress is found to be of moderate level. It is also apparent from the results that teacher stress is actually a multiple factor construct, and these factors are significantly related with each other. It is also suggested that teacher stress is negatively affecting job performance of teachers as perceived by their students. It is also found that teacher stress is negatively related with the self efficacy of teachers. Teacher efficacy may also play role as the moderator variable in the teacher stress phenomenon. The present research also suggests that there are certain job related and demographic variables such as teachers' age, job experience, marital status, number of students in class, teaching hours, means of transportation etc. that may contribute to this phenomenon.

In the area of teacher stress, the present research may be considered as the pioneering research. The development of indigenous scales to measure the teacher stress and job performance is a significant contribution in the areas of research and education. The sample of this research was specifically women secondary school teachers. However, these scales can be used to measure the levels and sources of stress among

male teachers and teachers of other categories such as special education, vocational etc., after determining their psychometric properties on each group separately. Fimian (1984) has determined norms and validity of TSI on all above-mentioned groups. The initial item pool for TJPS was also derived from the sample comprised of a varied group including male, female teachers, head teachers, educationist, Psychologists and students as well. The content and face validity of these items were determined through the opinions of experts. So we can use these scales for teachers who are involved with different types of students, and can determine psychometric properties of these scales on each sample. These scales may be used for individual or group purposes as well. With respect to the reliability and validity of TSI-Urdu it is apparent that it is adequately reliable and valid scale in terms of its empirical evidences. Thus, it can be used both for research and other field purposes, as well as for making group to group and individual to group comparisons. The identification of stress in teachers may help to improve the mental health of teachers and as a consequence, job performance. Teachers' job performance scale may help to assess the performance of teachers and on the bases of this evaluation educationists may plan their policies and curriculum. This evaluation may help to plan and to improve the training program for teachers. The implication of this research may also be seen in the area of women education, as we are eagerly striving to improve this component in our education system. The findings of this research also suggest the role of belief system in teacher stress and job performance. So this research may contribute significantly in helping to improve the role of socialization in the construction of our beliefs about our jobs and ourselves. So we may conclude that the implications of research are many and varied.

Limitations and Suggestions

Across the wide implications of present research, it is suggested that no research is without limitations. There are certain limitations of the present research:

1. The present research was a pioneer research in the area of teacher stress, so it focused only women secondary school teachers because it was a general observation that in our society the most of the employed women are in teaching profession. As compared to men, this is the most preference profession by women. It was also apparent by literature that with regard to stress in teachers women are more prone to the experience of stress as compared to men. However, the future research may be conducted to compare the stress levels of men and women teachers. The comparison may be done between different groups of teachers as primary, elementary, special education, or vocational teachers, and between the teachers of different subjects such as science teachers or arts teachers and teachers from different school systems belonging to different socioeconomic classes.
2. The sample size used in the present research is not large enough. For further research a national sample may be included in the study. It will help particularly, to establish norms, concurrent validity and reliability of the scales. The sample of students for the evaluation of teachers' job performance may be comprised of according to the proportion to the population.
3. The sufficient psychometric properties of the scales developed in the present research were determined but still a lot of analysis can be computed to standardize the scales and to find out the norms of the scales. So it is suggested to compute further analysis.

4. In the present study stress and self efficacy of teachers is measured with the help of self rated scales. It is suggested that external ratings such as ratings by headmistress or the colleagues of teachers, must be used to validate the self ratings. For the evaluation of teachers job performance, students' ratings were used. Although students' ratings have strong validity, however, these ratings may be cross validated with the ratings of headmistresses and colleagues' ratings.

5. In this study we have found that teacher self efficacy can play a role of moderator in teacher stress phenomenon, however there is no exploration related to the development of high self efficacy. Further applied researches may be conducted to explore the validity of development techniques for high self efficacy and stress reduction techniques. These findings may help in establishing stress interventions and management techniques.

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APPENDIXES

TEACHER STRESS INVENTORY

The following are a number teacher concerns. Please identify those factors which cause you stress in your present position. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate how strong the feeling is when you experience it by circling the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, circle number 1 (no strength; not noticeable). The rating scale is shown at the top of each page.

Examples:

I feel insufficiently prepared for my job. 1 2 3 4 5

If you feel very strongly that you are insufficiently prepared for your job, you would circle number 5.

I feel that if I step back in either effort or commitment, I may be seen as less competent. 1 2 3 4 5

If you never feel this way, and the feeling does not have noticeable strength, you would circle number 1.

	1	2	3	4	5
HOW STRONG ?	no strength; not noticeable	mild strength; barely noticeable	medium strength; moderately noticeable	great strength; very noticeable	major strength; extremely noticeable

TIME MANAGEMENT

1. I easily over-commit myself.	1	2	3	4	5
2. I become impatient if others do things to slowly	1	2	3	4	5
3. I have to try doing more than one thing at a time	1	2	3	4	5
4. I have little time to relax/enjoy the time of day.	1	2	3	4	5
5. I think about unrelated matters during conversations.	1	2	3	4	5
6. I feel uncomfortable wasting time.	1	2	3	4	5
7. There isn't enough time to get things done.	1	2	3	4	5
8. I rush in my speech.	1	2	3	4	5

WORK-RELATED STRESSORS

9. There is little time to prepare for my lessons/responsibilities.	1	2	3	4	5
10. There is too much work to do.	1	2	3	4	5
11. The pace of the school day is too fast.	1	2	3	4	5
12. My caseload/class is too big.	1	2	3	4	5
13. My personal priorities are being shortchanged due to time demands.	1	2	3	4	5
14. There is too much administrative paperwork in my job.	1	2	3	4	5

PROFESSIONAL DISTRESS

15. I lack promotion and/or advancement opportunities.	1	2	3	4	5
16. I am not progressing my job as rapidly as I would like.	1	2	3	4	5
17. I need more status and respect on my job.	1	2	3	4	5
18. I receive an inadequate salary for the work I do.	1	2	3	4	5
19. I lack recognition for the extra work and/or good teaching I do.	1	2	3	4	5

DISCIPLINE AND MOTIVATION

I feel frustrated...

20. ...because of discipline problems in my classroom.	1	2	3	4	5
21. ...having to monitor pupil behavior.	1	2	3	4	5
22. ...because some students would better if they tried.	1	2	3	4	5
23. ...attempting to teach students who are poorly motivated.	1	2	3	4	5
24. ...because of inadequate/poorly defined discipline problems.	1	2	3	4	5
25. ...when my authority is rejected by pupils/administration.	1	2	3	4	5

Add items 20 through 25; divide by 6; place your score here:

PROFESSIONAL INVESTMENT

26. My personal opinions are not sufficiently aired	1	2	3	4	5
27. I lack control over decisions made about classroom/school matters.	1	2	3	4	5
28. I am not emotionally/intellectually stimulated on the job.	1	2	3	4	5
29. I lack opportunities for professional improvement.	1	2	3	4	5

Add items 26 through 29; divide by 4; place your score here:

EMOTIONAL MANIFESTATIONS

I respond to stress...

30. ...by feeling insecure.	1	2	3	4	5
31. ...by feeling vulnerable.	1	2	3	4	5
32. ...by feeling unable to cope.	1	2	3	4	5
33. ...by feeling depressed.	1	2	3	4	5
34. ...by feeling anxious.	1	2	3	4	5

FATIGUE MANIFESTATIONS

I respond to stress...

35. ...by sleeping more than usual.	1	2	3	4	5
36. ...by procrastinating.	1	2	3	4	5
37. ...by becoming fatigued in a very short time.	1	2	3	4	5
38. ...with physical exhaustion.	1	2	3	4	5
39. ...with physical weakness.	1	2	3	4	5

CARDIOVASCULAR MANIFESTATIONS

I respond to stress...

40. ...with feelings of increased blood pressure.	1	2	3	4	5
41. ...with feeling of heart pounding or racing.	1	2	3	4	5
42. ...with rapid and/or shallow breath.	1	2	3	4	5

GASTRONOMICAL MANIFESTATIONS

I respond to stress...

43. ...with stomach pain of extended duration.	1	2	3	4	5
44. ...with stomach cramps.	1	2	3	4	5
45. ...with stomach acid.	1	2	3	4	5

BEHAVIORAL MANIFESTATIONS

I respond to stress...

46. ...by using over-the-counter drugs.	1	2	3	4	5
47. ...by using prescription drugs.	1	2	3	4	5
48. ...by using alcohol.	1	2	3	4	5
49. ...by calling in sick.	1	2	3	4	5

APPENDIX - B

TRANSLATION OF TSI IN URDU

1. میں اپنی استطاعت سے زیادہ ذمہ داری با آسانی قبول کر لیتی ہوں۔
2. دوسروں کے سست رفتاری سے کام کرنے پر میں بے چین ہو جاتی ہوں۔
3. مجھے بیک وقت ایک سے زیادہ کام کرنے کے لیے کوشش کرنا پڑتی ہے۔
4. مجھے لطف اندوز ہونے/ پرسکون ہونے کے لیے بہت کم وقت ملتا ہے۔
5. میں گفتگو کے دوران غیر متعلقہ معاملات کے متعلق سوچتی رہتی ہوں۔
6. میں وقت ضائع ہونے پر غیر مطمئن ہو جاتی ہوں۔
7. میرے پاس کام مکمل کرنے کے لیے وقت کافی نہیں ہوتا۔
8. میں بات چیت تیزی سے کرتی ہوں۔
9. مجھے پڑھانے کی تیاری اور دوسری ذمہ داریاں پوری کرنے کے لیے کم وقت ملتا ہے۔
10. میرے پاس کرنے کو بہت کام ہے۔
11. سکول میں کام کی رفتار بہت تیز ہے۔
12. میرے پاس کلاس اور دوسری سرگرمیوں کا کام بہت زیادہ ہے۔
13. مجھے اپنی ذاتی ترجیحات میں وقت کے تقاضے کی وجہ سے تبدیلی لانا پڑتی ہے۔
14. میری ملازمت میں انتظامی نوعیت کا کاغذی کام بہت زیادہ ہیں۔
15. مجھے آگے بڑھنے اور ترقی کے مواقع کم ملتے ہیں۔
16. میں ملازمت میں اپنی خواہش کے مطابق آگے نہیں بڑھ رہی ہوں۔
17. مجھے اپنی ملازمت میں زیادہ عزت اور احترام کی ضرورت ہے۔
18. میری تنخواہ میرے کام کے لحاظ سے کم ہے۔
19. میرے زیادہ کام کرنے یا اچھا پڑھانے کی کوئی قدر نہیں کی جاتی۔

میں جھنجھلاہٹ محسوس کرتی ہوں۔۔۔۔۔

20. کلاس میں نظم وضبط کے مسائل کی وجہ سے۔
21. طالب علموں کے رویوں کو دیکھ کر۔
22. کچھ ایسے طالب علموں کی وجہ سے جو اگر کوشش کریں تو بہتر ہو سکتے ہیں۔
23. ایسے طالبعلموں کو پڑھانے کی کوشش میں جن مین پڑھنے کے جذبہ کی کمی ہے۔
24. نظم وضبط کے نامناسب/مبہم مسائل کی وجہ سے۔
25. جب طالبات اور انتظامیہ میری اتھارٹی کو مسترد کرتے ہیں۔

26. میری ذاتی رائے کو مناسب توجہ نہیں دی جاتی۔
27. سکول یا کلاس کے متعلق معاملات کے بارے میں کیے جانے والے فیصلوں پر میرا کوئی اختیار نہیں ہے۔
28. مجھے ملازمت سے جذباتی یا ذہنی طور پر کوئی تحریک نہیں ملتی۔
29. مجھے پیشہ ورانہ اصلاح کے مواقع نہیں ملتے۔

دباؤ کے ردِعمل کے طور پر۔۔۔

30. میں خود کو غیر محفوظ سمجھتی ہوں۔
31. خود کو قابلِ شکست سمجھتی ہوں۔
32. خو کو مشکل صورتحال سے نمٹنے کے قابل نہیں سمجھتی۔
33. آزردہ/ ناخوش ہو جاتی ہوں۔
34. بے چینی/تشویش محسوس کرتی ہوں۔
35. معمول سے زیادہ سوتی ہوں۔
36. اپنے کام التواء میں ڈال دیتی ہوں۔
37. بہت جلد تھک جاتی ہوں۔
38. جسمانی طور پر توانائی کی کم محسوس کرتی ہوں۔
39. جسمانی کمزوری محسوس کرتی ہوں۔
40. میرا بلڈ پریشر بڑھ جاتا ہے۔
41. دل کی دھڑکن تیز ہو جاتی ہے۔
42. میری سانس پھولنے لگتی ہے۔
43. معدے میں لمبے دورانیے کا درد ہوتا ہے۔
44. معدے میں شدید کھنچاؤ محسوس ہوتا ہے۔
45. معدے میں تیزابیت ہو جاتی ہے۔
46. خود تجویز کردہ دوائیوں کا استعمال کرتی ہوں۔
47. ڈاکٹر کی تجویز کردہ دوائیوں کا استعمال کرتی ہوں۔
48. نشہ آور ادویات کا استعمال کرتی ہوں۔
49. بیمار پڑ جاتی ہوں۔

BACK TRANSLATION OF TSI

1. I over commit responsibilities, easily.
2. I become impatient over others, doing things slowly.
3. I have to try a lot to do more than one thing at a time.
4. I get less time to enjoy/relax.
5. I do think about irrelevant things during conversation.
6. I feel unsatisfied over wasting time.
7. I don't have enough time to complete the things.
8. I talk rushly.
9. I get less time to prepare lessons and to carryout other responsibilities.
10. I have a lot of work to do.
11. The time spent in school is too busy.
12. I have a work overload of class and other activities.
13. I have to change my personal priorities due to time demands.
14. Besides teaching, I have many other duties in any job.
15. I lack promotion and advancement chances.
16. I am not progressing in my job, according to my will.
17. I need more respect and status in my job.
18. My salary is inadequate to my work.
19. There is no recognition for my good teaching and extra work.

    I feel frustrated .....

20. due to the discipline problems in my classroom.
21. Because of the attitudes of the students.
22. Because of some of such students who may perform better, if they tried.
23. To attempt to teach students who are less motivated.
24. Because of ambiguous and inappropriate discipline problems.
25. Because of the rejection of my authority by students and administration.

26. Because of insufficient weightage to my personal opinion.

27. I lack in emotional or mental stimulation from my job.

28. I lack control over decision about school or classroom matters.

29. I lack opportunities for professional advancement.

I respond to stress .....

30. By feeling insecure

31. By feeling vulnerable

32. By feeling unable to cope with difficult situation.

33. By feeling sad/unhappy.

34. By feeling restlessness/anxious.

35. By sleeping more than usual.

36. By procrastinating my work.

37. By becoming fatigued easily.

38. By feeling physical exhaustion.

39. By feeling physical weakness.

40. By feeling increased blood pressure.

41. By feeling racing heartbeat.

42. By feeling rapid breathing.

43. By feeling stomach pain of extended duration.

44. By feeling stomach cramps.

45. By feeling stomach acidity.

46. By using self-prescribed drugs.

47. By using drugs prescribed by doctor.

48. By using relaxants.

49. By calling in sick.

Appendix-D

QUESTIONNAIRE FOR TEACHERS JOB PERFORMANCE

میں اساتذہ کی ملازمت میں کارکردگی سے متعلق ایک سوالنامہ ترتیب دے رہی ہوں. آپ سے گزارش ہے کہ وہ تمام عناصر، رویے یا وہ تمام پہلو جو کہ اسکول کے اساتذہ کی کارکردگی سے متعلقہ ہو سکتے ہیں، ان کی نشان دہی کریں. شکریہ!

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Appendix-E

ITEMS POOL FOR TEACHERS JOB PERFORMANCE SCALE

بیانات

1. اس ٹیچر کے پڑھانے کا طریقہ اچھا ہے۔
2. وہ پڑھانے کے لئے مختلف طریقوں کا استعمال کرتی ہیں۔
3. وہ پڑھانے کے لئے جدید طریقوں کا استعمال بھی کرتی ہیں۔
4. وہ ہر سبق تفصیل سے سمجھاتی ہیں۔
5. وہ شوق سے پڑھاتی ہیں۔
6. اُنہیں اپنے مضمون کا وسیع علم ہے۔
7. وہ باقاعدگی سے سکول آتی ہیں۔
8. وہ سکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہیں۔
9. وہ اپنے پیریڈ میں غیر ضروری کام نہیں کرتیں۔
10. وہ فارغ اوقات میں بھی طالبات کو پڑھا دیتی ہیں۔
11. وہ طالبات کے ساتھ پیار سے بات کرتی ہیں۔
12. وہ اپنی طالبات کے ساتھ مخلص ہیں۔
13. پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہیں۔
14. وہ پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہیں۔
15. اُنہیں جو بھی کام دیا جائے تو وہ خوشی سے کرتی ہیں۔
16. وہ ہر ڈیوٹی خوش اسلوبی سے انجام دیتی ہیں۔
17. وہ پڑھانے کے علاوہ دوسری ذمہ داریاں رضا کارانہ طور پر بھی لے لیتی ہیں۔
18. وہ اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کرتی ہیں۔
19. اُن کے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں۔
20. وہ ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہیں۔
21. وہ فارغ وقت اپنی ساتھی اساتذہ کے ساتھ گذارنا پسند کرتی ہیں۔
22. وہ اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہیں۔
23. ان کا رویہ اپنی ساتھی اساتذہ کے ساتھ اچھا ہے۔
24. اس کے ساتھی اساتذہ اُسے ایک اچھا استاد سمجھتے ہیں۔
25. اُن کی کلاس کے زیادہ تر بچے اچھے نمبر لے لیتے ہیں۔
26. وہ ہر بچے کی صلاحیت کے مطابق اُسے پڑھاتی ہیں۔
27. اُن کا پڑھایا ہوا بچوں کو آسانی سے سمجھ آ جاتا ہے۔

28. اُن کا پڑھانے کا انداز آسان ہے۔
29. وہ پڑھانے کے لئے گھر سے تیاری کر کے آتی ہیں۔
30. وہ کلاس میں حالاتِ حاضرہ کی باتیں بھی بتاتی ہیں۔
31. وہ طالبات کی اخلاقی تربیت کرنے کی بھی کوشش کرتی ہیں۔
32. وہ طالبات کو غیر نصابی سرگرمیوں میں حصّہ لینے کے لئے متحرک کرتی ہیں۔
33. اُن کی غیر نصابی سرگرمیوں میں ڈیوٹی سے اُن کی کلاس کی پڑھائی متاثر نہیں ہوتی۔
34. وہ مشکل اسباق بھی آسانی سے پڑھا لیتی ہیں۔
35. وہ اپنا سلیبس وقت پر ختم کروا لیتی ہیں۔
36. اگر کوئی طالبہ کلاس میں سوال کرے تو وہ اُسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہیں۔
37. وہ طالبات کے سوال پوچھنے پر ناراض نہیں ہوتیں۔
38. وہ طالبات کو کلاس میں بحث کرنے کے لئے متحرک کرتی ہیں۔
39. وہ اپنی کلاس میں نظم وضبط قائم رکھتی ہیں۔
40. وہ سب طالبات سے یکساں سلوک کرتی ہیں۔
41. وہ نمبر لگانے میں ناانصافی نہیں کرتیں۔
42. وہ کم ذہین اور کم دلچسپی رکھنے والی طالبات کو بھی کامیابی سے پڑھا لیتی ہیں۔
43. وہ اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتیں۔
44. وہ باقاعدگی سے سکول کی meetings میں حاضر ہوتی ہیں۔
45. اُن کی ذمہ داریوں میں کوئی تبدیلی کر دیں تو وہ مطابقت کر لیتی ہیں۔
46. وہ ہر کام ہیڈ مسٹرس کے نوٹس میں لا کر کرتی ہیں۔
47. اُن کی کسی غلطی کی نشاندھی کر دی جائے تو وہ اُسے بہتر بنانے کی کوشش کرتی ہیں۔
48. وہ طالبات کی بہتری کے لئے اُن کے والدین سے رابطہ رکھتی ہیں۔
49. وہ اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہیں۔
50. وہ سکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہیں۔

ہدایات

میں سکول ٹیچرز کی کارکردگی کو Evaluate کرنے کے لئے Job Performance Scale مرتب کر رہی ہوں۔ اس سلسلے میں ابتدائی طور پر ایک open ended سوالنامہ کی مدد سے اساتذہ، والدین اور طالب علموں سے لی گئی رائے کے مطابق کچھ بیانات ترتیب دئے گئے ہیں جن کی تعداد 50 ہے۔ یہ بیانات مندرجہ ذیل Dimensions کو مدِ نظر رکھ کر ترتیب دئے گئے ہیں۔

(TS)	Teaching Style	.1
(TQ)	Teaching Quality	.2
(DR)	Discipline and Regularity	.3
(MS)	Motivational and Management Skill	.4
(SK)	Subject Knowledge	.5
(IR)	Interpersonal Relations (With students and colleagues)	.6
(O)	Others	.7

اس سوالنامہ میں موجود ہر بیان اوپر دی گئی کسی ایک category سے تعلق رکھتا ہے آپ سے گذارش ہے کہ ہر بیان کو غور سے پڑھنے کے بعد وہ جس category سے تعلق رکھتا ہو اس پر (✓) کا نشان لگا دیں۔ اگر کوئی بیان پہلی چھ categories میں سے کسی سے بھی تعلق نہ رکھتا ہو تو پھر اُسے others میں لکھ دیں۔

اس کے علاوہ آپ سے یہ بھی گذارش ہے کہ اگر کوئی بیان ٹیچرز کی job performance سے مطابقت نہیں رکھتا تو اس کی نشاندہی کر دیں اور اگر آپ کوئی بیان مزید شامل کرنا چاہیں تو وہ بھی کر دیں۔

آپ کے تعاون کا شکریہ!

	بیانات	TS	TQ	DR	MS	SK	IR	O
.1	اس ٹیچر کے پڑھانے کا طریقہ اچھا ہے۔	------	------	------	------	------	------	------
.2	وہ پڑھانے کے لیئے مختلف طریقوں کا استعمال کرتی ہیں۔	------	------	------	------	------	------	------
.3	وہ پڑھانے کے لئے جدید طریقوں کا استعمال بھی کرتی ہیں۔	------	------	------	------	------	------	------
.4	وہ ہر سبق تفصیل سے سمجھاتی ہیں۔	------	------	------	------	------	------	------
.5	وہ شوق سے پڑھاتی ہیں۔	------	------	------	------	------	------	------
.6	اُنہیں اپنے مضمون کا وسیع علم ہے۔	------	------	------	------	------	------	------
.7	وہ باقاعدگی سے سکول آتی ہیں۔	------	------	------	------	------	------	------
.8	وہ سکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہیں۔	------	------	------	------	------	------	------
.9	وہ اپنے پیریڈ میں غیر ضروری کام نہیں کرتیں۔	------	------	------	------	------	------	------
.10	وہ فارغ اوقات میں بھی طالبات کو پڑھا دیتی ہیں۔	------	------	------	------	------	------	------
.11	وہ طالبات کے ساتھ پیار سے بات کرتی ہیں۔	------	------	------	------	------	------	------
.12	وہ اپنی طالبات کے ساتھ مخلص ہیں۔	------	------	------	------	------	------	------
.13	پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہیں۔	------	------	------	------	------	------	------
.14	وہ پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہیں۔	------	------	------	------	------	------	------
.15	اُنہیں جو بھی کام دیا جائے تو وہ خوشی سے کرتی ہیں۔	------	------	------	------	------	------	------
.16	وہ ہر ڈیوٹی خوش اسلوبی سے انجام دیتی ہیں۔	------	------	------	------	------	------	------
.17	وہ پڑھانے کے علاوہ دوسری ذمہ داریاں رضا کارانہ طور پر بھی لے لیتی ہیں۔	------	------	------	------	------	------	------
.18	وہ اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کرتی ہیں۔	------	------	------	------	------	------	------
.19	اُن کے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں۔	------	------	------	------	------	------	------
.20	وہ ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہیں۔	------	------	------	------	------	------	------
.21	وہ فارغ وقت اپنی ساتھی اساتذہ کے ساتھ گذارنا پسند کرتی ہیں۔	------	------	------	------	------	------	------
.22	وہ اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہیں۔	------	------	------	------	------	------	------
.23	ان کا رویہ اپنی ساتھی اساتذہ کے ساتھ اچھا ہے۔	------	------	------	------	------	------	------
.24	اس کے ساتھی اساتذہ اُسے ایک اچھا استاد سمجھتے ہیں۔	------	------	------	------	------	------	------
.25	اُن کی کلاس کے زیادہ تر بچے اچھے نمبر لے لیتے ہیں۔	------	------	------	------	------	------	------
.26	وہ ہر بچے کی صلاحیت کے مطابق اُسے پڑھاتی ہیں۔	------	------	------	------	------	------	------
.27	اُن کا پڑھایا ہوا بچوں کو آسانی سے سمجھ آجاتا ہے۔	------	------	------	------	------	------	------

	بیانات	TS	TQ	DR	MS	SK	IR	O
28.	اُن کا پڑھانے کا انداز آسان ہے۔							
29.	وہ پڑھانے کے لئے گھر سے تیاری کر کے آتی ہیں۔							
30.	وہ کلاس میں حالاتِ حاضرہ کی باتیں بھی بتاتی ہیں۔							
31.	وہ طالبات کی اخلاقی تربیت کرنے کی بھی کوشش کرتی ہیں۔							
32.	وہ طالبات کو غیر نصابی سرگرمیوں میں حصّہ لینے کے لئے متحرک کرتی ہیں۔							
33.	اُن کی غیر نصابی سرگرمیوں میں ڈیوٹی سے اُن کی کلاس کی پڑھائی متاثر نہیں ہوتی۔							
34.	وہ مشکل اسباق بھی آسانی سے پڑھا لیتی ہیں۔							
35.	وہ اپنا سلیبس وقت پر ختم کروا لیتی ہیں۔							
36.	اگر کوئی طالبہ کلاس میں سوال کرے تو وہ اُسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہیں۔							
37.	وہ طالبات کے سوال پوچھنے پر ناراض نہیں ہوتیں۔							
38.	وہ طالبات کو کلاس میں بحث کرنے کے لئے متحرک کرتی ہیں۔							
39.	وہ اپنی کلاس میں نظم وضبط قائم رکھتی ہیں۔							
40.	وہ سب طالبات سے یکساں سلوک کرتی ہیں۔							
41.	وہ نمبر لگانے میں ناانصافی نہیں کرتیں۔							
42.	وہ کم ذہین اور کم دلچسپی رکھنے والی طالبات کو بھی کامیابی سے پڑھا لیتی ہیں۔							
43.	وہ اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتیں۔							
44.	وہ باقاعدگی سے سکول کی meetings میں حاضر ہوتی ہیں۔							
45.	اُن کی ذمہ داریوں میں کوئی تبدیلی کر دیں تو وہ مطابقت کر لیتی ہیں۔							
46.	وہ ہر کام ہیڈ مسٹرس کے نوٹس میں لا کر کرتی ہیں۔							
47.	اُن کی کسی غلطی کی نشاندھی کر دی جائے تو وہ اُسے بہتر بنانے کی کوشش کرتی ہیں۔							
48.	وہ طالبات کی بہتری کے لئے اُن کے والدین سے رابطہ رکھتی ہیں۔							
49.	وہ اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہیں۔							
50.	وہ سکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہیں۔							

APPENDIX - G

CATEGORIZATION OF TEACHERS JOB PERFORMANCE SCALE

Teaching Skills

1. اس ٹیچر کے پڑھانے کا طریقہ اچھا ہے۔
2. وہ پڑھانے کے لِئے مختلف طریقوں کا استعمال کرتی ہیں۔
3. اُنہیں اپنے مضمون کا وسیع علم ہے۔
4. اُن کی کلاس کے زیادہ تر بچے اچھے نمبر لے لیتے ہیں۔
5. وہ ہر بچے کی صلاحیت کے مطابق اُسے پڑھاتی ہیں۔
6. وہ پڑھانے کے لئے گھر سے تیاری کر کے آتی ہیں۔
7. وہ مشکل اسباق بھی آسانی سے پڑھا لیتی ہیں۔
8. اگر کوئی طالبہ کلاس میں سوال کرے تو وہ اُسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہیں۔
9. وہ نمبر لگانے میں ناانصافی نہیں کرتیں۔

Management Skills

10. وہ پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہیں۔
11. اُن کی غیر نصابی سرگرمیوں میں ڈیوٹی سے اُن کی کلاس کی پڑھائی متاثر نہیں ہوتی۔
12. وہ اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتیں۔
13. اُن کی ذمہ داریوں میں کوئی تبدیلی کر دیں تو وہ مطابقت کر لیتی ہیں۔
14. وہ اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہیں۔

Discipline and Regularity

15. وہ باقاعدگی سے سکول آتی ہیں۔
16. وہ سکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہیں۔
17. وہ اپنے پیریڈ میں غیر ضروری کام نہیں کرتیں۔
18. وہ اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کرتی ہیں۔
19. وہ اپنا **سلیبس** وقت پر ختم کروا لیتی ہیں۔
20. وہ اپنی کلاس میں نظم وضبط قائم رکھتی ہیں۔

21. پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہیں۔
22. اُن کے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں۔
23. وہ ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہیں۔
24. وہ اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہیں۔
25. وہ طالبات کو غیر نصابی سرگرمیوں میں حصّہ لینے کے لئے متحرک کرتی ہیں۔
26. وہ طالبات کی بہتری کے لئے اُن کے والدین سے ملتی رہتی ہیں۔
27. وہ اسکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہیں۔

Appendix-H

TEACHERS JOB PERFORMANCE SCALE

بیانات	ہمیشہ	زیادہ تر	اکثر	کبھی کبھی	کبھی نہیں
1. اس ٹیچر کے پڑھانے کا طریقہ اچھا ہے۔					
2. وہ پڑھانے کے لِئے مختلف طریقوں کا استعمال کرتی ہیں۔					
3. اُنہیں اپنے مضمون کا وسیع علم ہے۔					
4. اُن کی کلاس کے زیادہ تر بچے اچھے نمبر لے لیتے ہیں۔					
5. وہ ہر بچے کی صلاحیت کے مطابق اُسے پڑھاتی ہیں۔					
6. وہ پڑھانے کے لئے گھر سے تیاری کر کے آتی ہیں۔					
7. وہ مشکل اسباق بھی آسانی سے پڑھا لیتی ہیں۔					
8. اگر کوئی طالبہ کلاس میں سوال کرے تو وہ اُسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہیں۔					
9. وہ نمبر لگانے میں ناانصافی نہیں کرتیں۔					
10. وہ پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہیں۔					
11. اُن کی غیر نصابی سرگرمیوں میں ڈیوٹی سے اُن کی کلاس کی پڑھائی متاثر نہیں ہوتی۔					
12. وہ اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتیں۔					
13 اُن کی ذمہ داریوں میں کوئی تبدیلی کر دیں تو وہ مطابقت کر لیتی ہیں۔					
14. وہ اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہیں۔					
15. وہ باقاعدگی سے سکول آتی ہیں۔					
16. وہ سکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہیں۔					
17. وہ اپنے پیریڈ میں غیر ضروری کام نہیں کرتیں۔					
18. وہ اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کرتی ہیں۔					
19. وہ اپنا **سلیبس** وقت پر ختم کروا لیتی ہیں۔					
20. وہ اپنی کلاس میں نظم وضبط قائم رکھتی ہیں۔					
21. پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہیں۔					
22. اُن کے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں۔					
23. وہ ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہیں۔					
24. وہ اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہیں۔					
25. وہ طالبات کو غیر نصابی سرگرمیوں میں حصّہ لینے کے لئے متحرک کرتی ہیں۔					
26. وہ طالبات کی بہتری کے لئے اُن کے والدین سے ملتی رہتی ہیں۔					
27. وہ اسکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہیں۔					

Appendix-I

TEACHERS JOB PERFORMANCE SCALE FOR SELF RATINGS

نمبر شمار	بیانات	ہمیشہ	زیادہ تر	اکثر	کبھی کبھی
1.	میں پڑھانے کے لئے مختلف طریقوں کا استعمال کرتی ہوں.	.....	.....	.....	.....
2.	میری کلاس کے زیادہ تر بچے اچھے نمبر لیتے ہیں.	.....	.....	.....	.....
3.	میں ہر بچے کی صلاحیت کے مطابق اسے پڑھاتی ہوں.	.....	.....	.....	.....
4.	میں پڑھانے کے لئے گھر سے تیاری کر کے آتی ہوں.	.....	.....	.....	.....
5.	میں مشکل اسباق بھی آسانی سے پڑھا لیتی ہوں.	.....	.....	.....	.....
6.	اگر کوئی طالبہ کلاس میں سوال کرے تو میں اسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہوں.	.....	.....	.....	.....
7.	میں نمبر لگانے میں ناانصافی نہیں کرتی.	.....	.....	.....	.....
8.	میں پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہوں.	.....	.....	.....	.....
9.	میں اپنی غیر نصابی سرگرمیوں میں ڈیوٹی سے اپنی کلاس کی پڑھائی متاثر نہیں ہونے دیتی.	.....	.....	.....	.....
10.	میں اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتی.	.....	.....	.....	.....
11.	میری ذمہ داریوں میں اگر کوئی تبدیلی کر دے تو میں اس سے مطابقت کر لیتی ہوں.	.....	.....	.....	.....
12.	میں اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہوں.	.....	.....	.....	.....
13.	میں باقاعدگی سے اسکول آتی ہوں.	.....	.....	.....	.....
14.	میں اسکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہوں.	.....	.....	.....	.....
15.	میں اپنے پیریڈ میں غیر ضروری کام نہیں کرتی.	.....	.....	.....	.....
16.	میں اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کر لیتی ہوں.	.....	.....	.....	.....
17.	میں اپنا **سلیبس** وقت پر ختم کروا دیتی ہوں.	.....	.....	.....	.....
18.	میں اپنی کلاس میں نظم وضبط قائم رکھتی ہوں.	.....	.....	.....	.....
19.	پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہوں.	.....	.....	.....	.....
20.	میرے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں.	.....	.....	.....	.....
21.	میں ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہوں.	.....	.....	.....	.....
22.	میں اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہوں.	.....	.....	.....	.....
23.	میں طالبات کو غیر نصابی سرگرمیوں میں حصہ لینے کے لئے متحرک کرتی ہوں.	.....	.....	.....	.....
24.	میں طالبات کی بہتری کے لئے ان کے والدین سے رابطہ رکھتی ہوں.	.....	.....	.....	.....
25.	میں اسکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہوں.	.....	.....	.....	.....

Appendix-J

TEACHER EFFICACY SCALE

ہدایات

نیچے کچھ بیانات معلم تدریس و دیگر تعلیمی معاملات کے متعلق لکھے ہوئے ہیں. آپ بطور معلم بعض بیانات کے ساتھ متفق اور بعض کے ساتھ غیر متفق ہو سکتے یں. بتایئے کہ آپ کسی بیان سے کس حد تک متفق یا غیر متفق ہیں. نیز بتایئے کہ آپ کچھ متفق ہیں یا کافی متفق ہیں. اسی طرح آپ کسی بیان سے کچھ غیر متفق یا کافی غیر متفق ہیں.

نیچے دیئے گئے ہر بیان کے آخر میں کافی متفق، کچھ متفق، کچھ غیر متفق اور کافی غیر متفق بطور جواب لکھے ہوئے ہیں. آپ ان چار میں سے ایک پر نشان ✓ لگا کر اپنا جواب ظاہر کریں.

نمبر شمار	بیانات	کافی متفق	کچھ متفق	کچھ غیر متفق	کا
1.	اگر کوئی طالب علم اپنے سابقہ معیار سے مسلسل بہتر کارکردگی دکھائے تو اس کی وجہ اکثر اوقات یہ ہوتی ہے کہ میں نے اس کے ساتھ زیادہ محنت کی ہوتی ہے۔	.....	.....	.....	
2.	چند گھنٹے اسکول میں رہنے سے طلبہ پر تھوڑا اثر پڑتا ہے جبکہ زیادہ تر ان پر گھر کے ماحول کا اثر پڑتا ہے۔	.....	.....	.....	
3.	ایک طالب علم کتنا کچھ سیکھ سکتا ہے، اس کا تعین بنیادی طور پر اس کے خاندان سے ہوتا ہے۔	.....	.....	.....	
4.	اگر طلبہ کو گھر سے نظم وضبط کی تربیت نہ ملے تو پھر بہت ممکن ہے کہ وہ کسی بھی نظم وضبط کی پابندی نہیں کریں گے۔	.....	.....	.....	
5.	میری تربیت وتجربہ اتنا ہے کہ طلبہ کو سیکھنے میں کوئی بھی مشکل درپیش ہو تو میں اسے حل کر سکتا ہوں۔	.....	.....	.....	
6.	تربیت اور تجربے نے مجھے وہ مہارتیں سکھائی ہیں جن کی وجہ سے میں ایک قابل استاد بنا ہوں۔	.....	.....	.....	
7.	اگر کسی طالب علم کو کلاس میں کام کرتے ہوئے کوئی دقت پیش آ رہی ہو تو میں عام طور پر کام کو اس کے درجہ قابلیت کے مطابق آسان بنا دیتا ہوں۔	.....	.....	.....	
8.	جب میرے طلبہ اپنے معمول سے بہتر نمبر اور گریڈ حاصل کرتے ہیں تو اس کی وجہ یہ ہوتی ہے کہ میں نے انہیں پڑھانے میں بہتر طریقے استعمال کئے ہوتے ہیں۔	.....	.....	.....	
9.	جب میں واقعی کوشش کرتا ہوں تو نہایت کند ذہن اور کم دلچسپی رکھنے والے طلبہ کو بھی سبق سمجھانے میں کامیاب ہو جاتا ہوں۔	.....	.....	.....	
10.	استاد ایک محدود حد تک ہی کامیاب ہو سکتا ہے کیونکہ طلبہ کی تعلیمی کارکردگی زیادہ تر ان کے گھر کے ماحول کے زیر اثر ہوتی ہے۔	.....	.....	.....	
11.	اگر طلبہ کی تعلیمی کارکردگی پر اثر انداز ہونے والے تمام عناصر کا جائزہ لیا جائے تو ان میں **استاد کا کردار** کوئی مضبوط عنصر کی حیثیت نہیں رکھتا۔	.....	.....	.....	
12.	اگر میرا کوئی شاگرد ریاضی کا کوئی مسئلہ جلد سمجھ لے تو اس کی وجہ یہ ہوتی ہے کہ میں اس مسئلے کو پڑھانے سے متعلق ضروری عمل سے واقف ہوتا ہوں۔	.....	.....	.....	
13.	اگر والدین بچوں پر زیادہ محنت اور وقت خرچ کریں تو اس صورت میں، میں بھی ان طلبہ پر زیادہ محنت کرنے پر تیار ہوں گا۔	.....	.....	.....	
14.	اگر طالب علم میرا پڑھایا ہوا سبق بھول جائے تو میں یہ جاننے کی کوشش کروں گا کہ اگلا سبق کس طریقے سے پڑھاؤں کہ اسے یاد رہے۔	.....	.....	.....	
15.	اگر میری کلاس میں کوئی طالب علم شرارتیں کرے یا شور مچائے تو مجھے یقین ہے کہ میں اسے جلد ہی درست راستے پر لا سکتا ہوں۔	.....	.....	.....	
16.	طلبہ پر مرتب شدہ گھریلو اثرات کو تعلیم وتربیت سے بدلا جا سکتا ہے۔	.....	.....	.....	
17.	اگر میرا کوئی طالب علم کلاس ورک نہ کر سکے تو میں ٹھیک ٹھیک اندازہ لگا سکتا ہوں کہ کیا وہ کام اس کی قابلیت کے مطابق بھی تھا یا نہیں۔	.....	.....	.....	
18.	ایک اچھی خاصی تدریسی مہارت رکھنے والا استاد بھی کئی ایک طلبہ کو سبق سمجھانے میں ناکام رہ جاتا ہے۔	.....	.....	.....	

ہدایات

نیچے کچھ بیانات معلم، تدریس و دیگر تعلیمی معاملات کے متعلق لکھے ہوئے ہیں۔ آپ بطور معلم بعض بیانات کے ساتھ متفق اور بعض کے ساتھ "غیر متفق" ہو سکتے ہیں۔ بتائیے کہ آپ کسی بیان سے کس حد تک "متفق" یا "غیر متفق" ہیں۔ نیز بتائیے کہ آپ کچھ متفق ہیں یا کافی متفق ہیں۔ اسی طرح آپ کسی بیان سے کچھ غیر متفق یا کافی غیر متفق ہیں۔

نیچے دیے گئے ہر بیان کے آخر میں کچھ متفق /کافی متفق/ کچھ غیر متفق /کافی غیر متفق بطور جواب لکھے ہوئے ہیں۔ آپ ان چار میں سے ایک پر نشان (✓) لگا کر اپنا جواب ظاہر کریں۔

نمبر شمار	بیانات	کافی متفق	کچھ متفق	کچھ غیر متفق	کافی غیر متفق
.1	اگر کوئی طالبہ اپنے سابقہ معیار سے مسلسل بہتر کارکردگی دکھائے تو اس کی وجہ اکثر اوقات یہ ہوتی ہے کہ میں نے اُس کے ساتھ زیادہ محنت کی ہوتی ہے۔	-------	-------	-------	-------
.2	ایک طالبہ کتنا کچھ سیکھ سکتی ہے اس کا تعین بنیادی طور پر اس کے خاندان سے ہوتا ہے۔	-------	-------	-------	-------
.3	اگر طالبات کو گھر سے نظم وضبط کی تربیت نہ ملے تو پھر بہت ممکن ہے کہ وہ کسی بھی نظم ضبط کی پابندی نہیں کریں گی۔	-------	-------	-------	-------
.4	میری تربیت وتجربہ اتنا ہے کہ طالبات کو سیکھنے میں کوئی بھی مشکل درپیش ہو میں اسے حل کرسکتی ہوں۔	-------	-------	-------	-------
.5	تربیت اور تجربے نے مجھے وہ مہارتیں سیکھائی ہیں جن کی وجہ سے میں ایک قابل استاد بنی ہوں۔	-------	-------	-------	-------
.6	اگر کسی طالبہ کو کلاس میں کام کرتے ہوئے کوئی دقت پیش آرہی ہو تو میں عام طور پر کام کو اس کے درجہ قابلیت کے مطابق آسان بنادیتی ہوں۔	-------	-------	-------	-------
.7	جب میری طالبات اپنے معمول سے بہتر نمبر اور گریڈ حاصل کرتی ہیں تو اس کی وجہ یہ ہوتی ہے کہ میں نے انہیں پڑھانے میں بہتر طریقے استعمال کئے ہوتے ہیں۔	-------	-------	-------	-------
.8	جب میں واقعی کوشش کرتی ہوں تو نہایت کند ذہن اور کم دلچسپی رکھنے والی طالبات کو بھی سبق سمجھانے میں کامیاب ہوجاتی ہوں۔	-------	-------	-------	-------
.9	استاد ایک محدود حد تک ہی کامیاب ہوسکتا ہے کیونکہ طالبات کی تعلیمی کارکردگی زیادہ تر ان کے گھر کے ماحول کے زیر اثر ہوتی ہے۔	-------	-------	-------	-------
.10	اگر طالبات کی تعلیمی کارکردگی پر اثر انداز ہونے والے تمام عناصر کا جائزہ لیا جائے تو ان میں "استاد کا کردار" کوئی مضبوط عنصر کی حیثیت نہیں رکھتا۔	-------	-------	-------	-------
.11	اگر والدین بچوں پر زیادہ محنت اور وقت خرچ کریں تو اس صورت میں میں بھی ان طالبات پر زیادہ محنت کرنے پر تیار ہوں گی۔	-------	-------	-------	-------
.12	اگر طالبات میرا پڑھایا ہوا سبق بھول جائیں تو میں یہ جاننے کی کوشش کروں گی کہ اگلا سبق کس طریقے سے پڑھاؤں کہ انھیں یاد رہے۔	-------	-------	-------	-------
.13	اگر میری کلاس میں کوئی طالبہ شرارتیں کرے یا شور مچائے تو مجھے یقین ہے کہ میں اسے جلد ہی درست راستے پر لاسکتی ہوں۔	-------	-------	-------	-------
.14	طالبات پر مرتب شدہ گھریلو اثرات کو تعلیم وتربیت سے بدلا جاسکتا ہے۔	-------	-------	-------	-------
.15	اگر میری کوئی طالبہ کلاس ورک نہ کرسکے تو میں ٹھیک ٹھیک اندازہ لگاسکتی ہوں کہ کیا وہ کام اس کی قابلیت کے مطابق بھی تھا یا نہیں۔	-------	-------	-------	-------
.16	ایک اچھی خاصی تدریسی مہارت رکھنے والا استاد بھی کئی ایک طالبات کو سبق سمجھانے میں ناکام رہ جاتا ہے۔	-------	-------	-------	-------

JOB RELATED AND DEMOGRAPHIC INFORMATION SHEET

1. Age _____
2. Education _____
3. Job Experience _____
4. Monthly Income _____
5. No. of Students you teach each day _____
6. No. of family member _____
7. Family system (Joint or Nuclear) _____
8. Marital Status _____
9. How do you go to school _____
10. Teaching Hours _____

ہدایات

ذیل میں اساتذہ کے ان پیشہ ورانہ معاملات سے متعلق بیانات ہیں جو ذہنی دباؤ (Stress) کا سبب بن سکتے ہیں آپ سے گذارش ہے کہ ہر بیان کو غور سے پڑھیں اور فیصلہ کریں کہ کیا آپ کو اپنی ملازمت میں اس صورتحال کا سامنا ہوا ہے اور یہ نشاندہی کریں کہ آپ کس حد تک ان سے متاثر ہوئی ہیں اس مقصد کے لیے آپ کو پانچ نکاتی پیمانہ دیا جارہا ہے ایک سے لے کر پانچ تک ہر ہندسہ اس شدت کو ظاہر کرتا ہے جس سے آپ متاثر ہوئی ہیں۔ مثال کے طور پر اگر آپ کسی صورتحال سے کبھی دوچار نہیں ہوئیں تو اس بیان کے سامنے ایک کے ہندسہ پر اس طرح سے ① دائرہ لگادیں یا پھر اگر آپ کو اس کا بہت زیادہ سامنا کرنا پڑتا ہے تو پانچ کے ہندسہ پر اس طرح سے ⑤ دائرہ لگادیں۔

پیمانہ کے درجات درج ذیل ہیں۔

1	2	3	4	5
کبھی نہیں	کبھی کبھی	اکثر	زیادہ تر	ہمیشہ

آپ ہر بیان کے سامنے 1 سے لے کر 5 تک کسی بھی ہندسہ پر دائرہ لگادیں جو کہ آپ کی صورتحال کی شدت کا اظہار کرتا ہو۔

شکریہ!

1.	میں اپنی استطاعت سے زیادہ ذمہ داری با آسانی قبول کر لیتی ہوں۔	1	2	3	4	5
2.	دوسروں کے سست رفتاری سے کام کرنے پر میں بے چین ہو جاتی ہوں۔	1	2	3	4	5
3.	مجھے بیک وقت ایک سے زیادہ کام کرنے کے لیے کوشش کرنا پڑتی ہے۔	1	2	3	4	5
4.	مجھے لطف اندوز ہونے/ پرسکون ہونے کے لیے بہت کم وقت ملتا ہے۔	1	2	3	4	5
5.	میں گفتگو کے دوران غیر متعلقہ معاملات کے متعلق سوچتی رہتی ہوں۔	1	2	3	4	5
6.	میں وقت ضائع ہونے پر غیر مطمئن ہو جاتی ہوں۔	1	2	3	4	5
7.	میرے پاس کام مکمل کرنے کے لیے وقت کافی نہیں ہوتا۔	1	2	3	4	5
8.	میں بات چیت تیزی سے کرتی ہوں۔	1	2	3	4	5
9.	مجھے پڑھانے کی تیاری اور دوسری ذمہ داریاں پوری کرنے کے لیے کم وقت ملتا ہے۔	1	2	3	4	5
10.	میرے پاس کرنے کو بہت کام ہے۔	1	2	3	4	5
11.	سکول میں کام کی رفتار بہت تیز ہے۔	1	2	3	4	5
12.	میرے پاس کلاس اور دوسری سرگرمیوں کا کام بہت زیادہ ہے۔	1	2	3	4	5
13.	مجھے اپنی ذاتی ترجیحات میں وقت کے تقاضے کی وجہ سے تبدیلی لانا پڑتی ہے۔	1	2	3	4	5
14.	میری ملازمت میں انتظامی نوعیت کا کاغذی کام بہت زیادہ ہیں۔	1	2	3	4	5
15.	مجھے آگے بڑھنے اور ترقی کے مواقع کم ملتے ہیں۔	1	2	3	4	5
16.	میں ملازمت میں اپنی خواہش کے مطابق آگے نہیں بڑھ رہی ہوں۔	1	2	3	4	5
17.	مجھے اپنی ملازمت میں زیادہ عزت اور احترام کی ضرورت ہے۔	1	2	3	4	5
18.	میری تنخواہ میرے کام کے لحاظ سے کم ہے۔	1	2	3	4	5
19.	میرے زیادہ کام کرنے یا اچھا پڑھانے کی کوئی قدر نہیں کی جاتی۔	1	2	3	4	5

میں جھنجھلاہٹ محسوس کرتی ہوں۔۔۔۔۔

20.	کلاس میں نظم وضبط کے مسائل کی وجہ سے۔	1	2	3	4	5
21.	طالب علموں کے رویوں کو دیکھ کر۔	1	2	3	4	5
22.	کچھ ایسے طالب علموں کی وجہ سے جو اگر کوشش کریں تو بہتر ہو سکتے ہیں۔	1	2	3	4	5
23.	ایسے طالبعلموں کو پڑھانے کی کوشش میں جن مین پڑھنے کے جذبہ کی کمی ہے۔	1	2	3	4	5
24.	نظم وضبط کے نامناسب/مبہم مسائل کی وجہ سے۔	1	2	3	4	5
25.	جب طالبات اور انتظامیہ میری اتھارٹی کو مسترد کرتے ہیں۔	1	2	3	4	5
26.	میری ذاتی رائے کو مناسب توجہ نہیں دی جاتی۔	1	2	3	4	5

.27	سکول یا کلاس کے متعلق معاملات کے بارے میں کیے جانے والے فیصلوں پر میرا کوئی اختیار نہیں ہے۔	1	2	3	4	5
.28	مجھے ملازمت سے جذباتی یا ذہنی طور پر کوئی تحریک نہیں ملتی۔	1	2	3	4	5
.29	مجھے پیشہ ورانہ اصلاح کے مواقع نہیں ملتے۔	1	2	3	4	5

دباؤ کے ردِعمل کے طور پر۔۔۔

.30	میں خود کو غیر محفوظ سمجھتی ہوں۔	1	2	3	4	5
.31	خود کو قابلِ شکست سمجھتی ہوں۔	1	2	3	4	5
.32	خو کو مشکل صورتحال سے نمٹنے کے قابل نہیں سمجھتی۔	1	2	3	4	5
.33	آزردہ/ ناخوش ہو جاتی ہوں۔	1	2	3	4	5
.34	بے چینی/تشویش محسوس کرتی ہوں۔	1	2	3	4	5
.35	معمول سے زیادہ سوتی ہوں۔	1	2	3	4	5
.36	اپنے کام التواء میں ڈال دیتی ہوں۔	1	2	3	4	5
.37	بہت جلد تھک جاتی ہوں۔	1	2	3	4	5
.38	جسمانی طور پر توانائی کی کم محسوس کرتی ہوں۔	1	2	3	4	5
.39	جسمانی کمزوری محسوس کرتی ہوں۔	1	2	3	4	5
.40	میرا بلڈ پریشر بڑھ جاتا ہے۔	1	2	3	4	5
.41	دل کی دھڑکن تیز ہو جاتی ہے۔	1	2	3	4	5
.42	میری سانس پھولنے لگتی ہے۔	1	2	3	4	5
.43	معدے میں لمبے دورانیے کا درد ہوتا ہے۔	1	2	3	4	5
.44	معدے میں شدید کھنچاؤ محسوس ہوتا ہے۔	1	2	3	4	5
.45	معدے میں تیزابیت ہو جاتی ہے۔	1	2	3	4	5
.46	خود تجویز کردہ دوائیوں کا استعمال کرتی ہوں۔	1	2	3	4	5
.47	ڈاکٹر کی تجویز کردہ دوائیوں کا استعمال کرتی ہوں۔	1	2	3	4	5
.48	نشہ آور ادویات کا استعمال کرتی ہوں۔	1	2	3	4	5
.49	بیمار پڑ جاتی ہوں۔	1	2	3	4	5

Appendix-N

ہدایات:

نیچے کچھ بیانات آپ کی ٹیچرز کی ملازمت اور اُن کے پڑھانے کے انداز کے متعلق دیئے گئے ہیں۔ آپ سے گذارش ہے کہ آپ سے جس ٹیچر کے متعلق پوچھا جارہا ہے اُن کی performance کو ذہن میں رکھتے ہوئے ہر بیان کے سامنے نشان لگائیں کہ یہ بیان اُن کے متعلق کس حد تک درست ہے مثلاً

"وہ پڑھانے کے لئے مختلف طریقوں کا استعمال کرتی ہیں"

اگر آپ کے خیال میں آپ کی ٹیچر ہمیشہ مختلف طریقوں سے پڑھاتی ہیں تو آپ "ہمیشہ" کے نیچے (✓) کا نشان لگادیں اور اگر وہ کبھی کبھی مختلف طریقوں سے پڑھاتی ہیں تو" کبھی کبھی" کے نیچے (✓) نشان لگادیں۔

آپ کے جوابات کو آپ کی ٹیچرز پر ظاہر نہیں کیا جائے گا اسلئے پوری ایمانداری سے جواب دیں۔

شکریہ!

بیانات	ہمیشہ	زیادہ تر	اکثر	کبھی کبھی	کبھی نہیں
1. وہ پڑھانے کے لِئے مختلف طریقوں کا استعمال کرتی ہوں۔	-------	-------	-------	-------	-------
2. اُن کی کلاس کے زیادہ تر بچے اچھے نمبر لے لیتے ہیں۔	-------	-------	-------	-------	-------
3. وہ ہر بچے کی صلاحیت کے مطابق اُسے پڑھاتی ہیں۔	-------	-------	-------	-------	-------
4. وہ پڑھانے کے لئے گھر سے تیاری کر کے آتی ہیں۔	-------	-------	-------	-------	-------
5. وہ مشکل اسباق بھی آسانی سے پڑھا لیتی ہیں۔	-------	-------	-------	-------	-------
6. اگر کوئی طالبہ کلاس میں سوال کریں تو وہ اُسے ہر طرح سے مطمئن کرنے کی کوشش کرتی ہیں۔	-------	-------	-------	-------	-------
7. وہ نمبر لگانے میں ناانصافی نہیں کرتیں۔	-------	-------	-------	-------	-------
8. وہ پڑھانے کے علاوہ اپنی ملازمت کی باقی ذمہ داریاں بھی اچھے طریقے سے پوری کرتی ہیں۔	-------	-------	-------	-------	-------
9. اُن کی غیر نصابی سرگرمیوں میں ڈیوٹی سے اُن کی کلاس کی پڑھائی متاثر نہیں ہوتی۔	-------	-------	-------	-------	-------
10. وہ اپنی ملازمت میں گھریلو ذمہ داریوں کو دخل انداز نہیں ہونے دیتیں۔	-------	-------	-------	-------	-------
11. اُن کی ذمہ داریوں میں کوئی تبدیلی کر دیں تو وہ مطابقت کر لیتی ہیں۔	-------	-------	-------	-------	-------
12. وہ اپنی کارکردگی کو بہتر بنانے کے لئے کوشش کرتی رہتی ہیں۔	-------	-------	-------	-------	-------
13. وہ باقاعدگی سے سکول آتی ہیں۔	-------	-------	-------	-------	-------
14. وہ سکول میں موجود ہوں تو ہمیشہ اپنی کلاس وقت پر لیتی ہیں۔	-------	-------	-------	-------	-------
15. وہ اپنے پیریڈ میں غیر ضروری کام نہیں کرتیں۔	-------	-------	-------	-------	-------
16. وہ اپنے ذمے لگائے گئے تمام کام وقت پر مکمل کرتی ہیں۔	-------	-------	-------	-------	-------
17. وہ اپنا **سلیبس** وقت پر ختم کروا لیتی ہیں۔	-------	-------	-------	-------	-------
18. وہ اپنی کلاس میں نظم وضبط قائم رکھتی ہیں۔	-------	-------	-------	-------	-------
19. پڑھائی کے علاوہ بھی طالبات کا کوئی مسئلہ ہو تو وہ حل کرنے کی کوشش کرتی ہیں۔	-------	-------	-------	-------	-------
20. اُن کے تعلقات اپنی ساتھی اساتذہ کے ساتھ اچھے ہیں۔	-------	-------	-------	-------	-------
21. وہ ہر کام میں اپنی ساتھی اساتذہ کے ساتھ تعاون کرتی ہیں۔	-------	-------	-------	-------	-------
22. وہ اپنی کلاس کے مسائل حل کرنے کے لئے اپنی ساتھی اساتذہ سے مشورہ کر لیتی ہیں۔	-------	-------	-------	-------	-------
23. وہ طالبات کو غیر نصابی سرگرمیوں میں حصہ لینے کے لئے متحرک کرتی ہیں۔	-------	-------	-------	-------	-------
24. وہ طالبات کی بہتری کے لئے اُن کے والدین سے رابطہ رکھتی ہیں۔	-------	-------	-------	-------	-------
25. وہ سکول کے مسائل حل کرنے میں ہیڈ مسٹرس کے ساتھ تعاون کرتی ہیں۔	-------	-------	-------	-------	-------

Appendix-O

DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

		N	*%*
Job Experience (1-24 years)	Group I (up to 5 yrs)	170	51.50
	Group II (above 5 yrs)	160	48.50
Age (21-50 years)	Group I (up to 37 yrs)	195	59.00
	Group II (above 37 yrs)	160	48.50
Marital Status	Married	149	45.25
	Unmarried	181	60.30
Number of Students (28-180)	Group I (up to 90)	154	46.70
	Group II (above 90)	176	53.30
Monthly Income (5000-9000)	Group I (up to 5000)	174	52.70
	Group II (above 5000)	156	47.30
School System	Government	166	50.3
	Private	164	49.7
Family Systems	Joint	147	44.5
	Nuclear	183	55.5
Number of Family Members (3-12)	Group I (up to 5)	148	44.8
	Group II (above 5)	182	55.2
Qualification	B.A/B.Sc	122	37
	M.A/M.Sc	208	63
Professional Training	Group I (No training)	44	13.3
	Group II (B.Ed)	197	59.7
	Group III (M.Ed)	89	27
City	Islamabad	110	33.3
	Rawalpindi	121	36.7
	Chakwal	99	30
Source of Transportation	Public Transport	197	59.7
	School Transport	48	14.5
	Personal Transport	85	25.8
Teaching hours/week (10 hrs/week —) 35 hrs/week	Group I (up to 30 hrs/week)	113	34.2
	Group II (above 30 hrs/week)	217	65.8