

T OCCUPATIONAL STRESS FACTORS  
AS PERCEIVED  
BY  
SECONDARY SCHOOL TEACHERS

by

PRITHMADEVI SOOFUL 700  
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D E C L A R A T I O N

I hereby declare that this dissertation is my own original work,  
and has not been submitted previously for a degree at any other  
university.

*P. Sooful*

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P. SOOFUL (MRS)

Durban  
1992

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D E D I C A T I O N  
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This dissertation is dedicated

with love

to my husband, JAYPAUL

and my

children, PREETHA and JAYREN

--ooo0ooo--

## A C K N O W L E D G E M E N T S

Like teaching, working on this dissertation has been both stressful and satisfying. I was very fortunate in having the support of many people who assisted in various ways, and I wish to extend my sincere appreciation and gratitude to the following:

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## A B S T R A C T

There is a growing body of evidence that occupational stress is a problem for a significant number of teachers. Teacher stress has a detrimental effect not only on the physical and mental well-being of teachers, but on their efficiency and productivity in the school setting as well.

This study investigated teacher stress within the interactional framework. Its main aim was to determine the nature and extent of stress patterns in a sample of 360 Indian school teachers selected from ten secondary schools in the Greater Durban area. Other closely related aims were to identify the most important task-, situation- and role-based sources of stress among these teachers, their most common reactions to excessive stress, their common modes of coping, as well as their most important sources of satisfaction and dissatisfaction. Furthermore, this study sought to investigate the influence of demographic characteristics on the teachers' experience of stress and coping. For this purpose intra-group comparisons were made involving six subsamples of teachers : male - female, married - unmarried, younger - older, less experienced - more experienced, diplomates - graduates, Level One teachers - Heads of Departments.

A self-administered questionnaire and in-depth interviews were used to obtain the quantitative and qualitative data required for this study.

Among the most important findings of the study are the following:

1. Over one-half of the number of the secondary teachers surveyed (54%) perceived their job as being very stressful.
2. The four most frequent and intense sources of stress were related to the working conditions of teachers rather than to the actual task of teaching. These stressors relate to poor career development prospects and a lack of accomplishment. More specifically, these are, in rank order : (1) the system of awarding merit notches; (2) the system of promotion; (3) the system of evaluation; and (4) a relatively low salary.

3. The four most important sources of role stress are, in rank order : (1) the volume and variety of tasks that teachers are expected to perform and the adverse effect this has on the quality of work they produce because of the limited time at their disposal; (2) being compelled to perform duties that appear to them to have little value; (3) having too heavy a workload; and (4) uncertainty about how superiors evaluate their teaching.
4. At least one-third of the teachers are "at risk" of developing more serious health problems.

Finally, the limitations of this study are discussed, and various recommendations are made. It is argued that stress among teachers is a complex phenomenon arising out of the interaction of a whole host of factors and circumstances. Consequently, any attempt at amelioration should be multidimensional in nature and involve a variety of disciplines.

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## CHAPTER ONE

### STRESS IN TEACHING : AN INTRODUCTION

#### 1.1 BACKGROUND TO THE STUDY

Stress is increasingly becoming a recognized occupational hazard of the teaching profession (Kyriacou and Sutcliffe, 1978; Farber 1984). Recent accounts in the news media, concern by teachers' associations and an increasing number of stress management seminars are indicative of a nationwide interest in teacher stress. Unfortunately, popular interest has outpaced substantive empirical research on the subject, particularly in South Africa. This study involving Indian secondary school teachers is a contribution towards remedying this deficiency.

The seriousness of the problem in Indian education was highlighted when the Teachers' Association of South Africa linked teacher stress to attrition in the profession and to problems with the recruitment of high-quality candidates who could be trained as teachers. Teacher attrition is also a matter of deep concern to educational policy-makers and administrators because of the vast resources invested in teacher education and in-service training. A national survey in the U.S.A. revealed that over 40% of teachers would not choose the teaching profession if they were given the opportunity of selecting their careers again. In

addition, a significant proportion indicated that they would prefer not to continue teaching until retirement (Truch, 1980:91-92).

Teacher stress has also been linked to physical symptoms and illnesses, negative emotional reactions, poor performance in the classroom, negative pupil outcomes, and absenteeism. The teacher who experiences severe stress and remains within the system, despite depleted motivation and initiative, poses an insidious problem since his/her demoralization and subsequent behaviour may directly affect the classroom atmosphere.

From the foregoing it is clear that any attempt to improve teacher performance in schools should ensure that the work environment enhances teachers' sense of professionalism and decreases their career dissatisfaction. In this connection Goodlad (1984:180) writes as follows : "When teachers find themselves restrained and inhibited by problems of the workplace .... it is reasonable to expect frustration and dissatisfaction to set in." This view is consistent with studies that suggest that if schools do not provide administrative support, reasonable class size, and participation in decision-making, teachers will have low professional commitment (Fuller, Wood, Rapoport & Dornbusch, 1982; Miskel , Fevurly & Stewart, 1979).

If the organizational work characteristics of schools associated with teacher dissatisfaction can be identified, the work environment of schools can be changed accordingly so as to ensure more continuous career satisfaction for teachers. Hopefully, this study will also serve as a catalyst for other more ambitious investigations undertaken by financially and technically better equipped organizations, like educational bureaux and institutions.

## 1.2 THE NATURE OF STRESS

In order to study and understand stress in the occupational environment, it is necessary first of all to provide a general framework within which to view the various aspects of stress, such as definitions of stress, sources of stress, the short- and long-term effects of stress, the coping process, and individual vulnerability to stress.

### 1.2.1 Definitions of stress

The definition of the term "stress" has been a source of much debate. There are three different ways of defining it and thus approaching its study : it may be defined as a stimulus, a response, or an interaction between the person and the environment, (Cox, 1978:3).

The stimulus-based definition views stress as a noxious or aversive characteristic of the person's environment. Researchers using this approach have focused on identifying

events that may result in health, behavioural or occupational problems (Dohrenwend and Dohrenwend, 1974; Holmes and Rahe, 1967).

The response-based definition views stress in terms of the individual's response to noxious or aversive stimuli in the environment. The pioneer of this approach, Selye, defined stress as the "non-specific response of the body to any demand made upon it" (Selye, 1974:7). According to Selye, the effects of stressful stimuli (stressors) could be either positive or beneficial ("eustress") or negative and harmful ("distress").

The interactional or transactional definition is the currently accepted view. It sees stress as a dynamic relationship or transaction between the demands of the environment and the person's ability to deal with them. According to Lazarus and Launier (1978:296), the term "stress" is "any event in which environmental or internal demands (or both) tax or exceed the adaptive resources of an individual, social system, or tissue system".

The person's cognitive appraisal determines the degree of stress. The primary appraisal evaluates a situation as either irrelevant, benign-positive or stressful (i.e. constituting harm-loss, threat, or challenge). The secondary appraisal evaluates the individual's resources for coping with the threat.



In the several interactional models of stress which have been proposed, for example, those by Lazarus, McGrath and Cox, stress is treated not as a "stimulus" or "response" but as a multivariate process which describes the way in which people realize and identify their problems, how they react to them and attempt to cope with them, and the "cost" of doing so (Harre and Lamb, 1986:275). According to the interactional approach, therefore, the occurrence of stress is determined by the individual's vulnerability in terms of physiological predispositions, perceptual-cognitive appraisals, and coping competence (Magnusson, 1982:235).

#### 1.2.2 Sources of stress

Stress stems from many sources, including the societal organizational and personal levels. In the life of the individual, stress may arise out of the following three circumstances :

1. the occurrence of stressful life events requiring major adjustments (eg. getting married, losing one's job);
2. the presence of ongoing (chronic) role strains, and
3. "daily hassles" which refer to the myriad of minor frustrations and conflictful events in our everyday lives (Leventhal and Tomarken, 1987:40-41).

In the early life-events research, the change induced by eventful experiences (e.g. death of a spouse, marriage) was viewed as imposing a tax on the individual; hence the greater the change, the greater the tax. However, later

researchers such as Pearlin et al.(1981) point out that the stressful consequences of events depend not only on the number of the events and the magnitude of the changes they entail, but on the *quality* of the eventful change as well. The quality of the life events may be distinguished according to their desirability, the degree of control people have over their occurrence, and whether they are scheduled life-cycle transitions (e.g. marriage, having children, retirement) or unscheduled events (e.g. divorce, illness, losing one's job). In contrast to scheduled events, those that are unscheduled are more greatly associated with stress (Pearlin and Lieberman, 1979).

The later researchers also argue that disrupted life events acquire much of their stressful character not by their own, direct impact, but indirectly by disrupting and dislocating the more structured elements of peoples' lives (Pearlin et al., 1981:338-339). For example, loss of one's job contributes to stress through its negative effect on the economic circumstances in a home.

Pearlin (1983:3-32) suggests that life events can generate role strain by adversely altering or intensifying the more structured aspects of social roles, resulting in a diminishment of self-concept, more particularly the dimensions of mastery and self-esteem (1983:4-5). Roles are potent sources of stress because people usually attach considerable importance to their role activities in institutions such as the family and their occupations.

Persistent role strains experienced by individuals can be interpreted as personal failure and may have an erosive effect on their self-image.

Pearlin lists six types of role strains : task strains such as work overload; interpersonal and intrapersonal role-induced conflict; conflict arising from role captivity; conflicts arising from the loss and gain of roles (as in the progression of the individual through the family and occupational life-cycle); and conflict arising from role restructuring.

The role strain approach emphasizes the importance of interpersonal and self-image factors in the experience of stress and the importance of roles in the maintenance of stress over long periods.

### 1.2.3 Individual reactions to stress

Researchers in the field of stress have for a long time recognized the differential effects of stressors (i.e. sources of stress). Selye distinguishes between the positive, creative and motivating aspects which he refers to as "eustress", and the negative, debilitating and aversive ones which he calls "distress". The latter aspects will be of most concern to stress researchers.

The intensity of the stress experienced by the individual will determine the intensity of the response to the stressor. As a general rule, as the level of arousal increases, performance also increases, thus the individual is well motivated and he functions at an optimal level. However, when the arousal becomes excessive, his performance deteriorates and his functioning at the physiological and/or psychological level becomes disrupted.

#### 1.2.3.1 Physiological reactions to stress

Cannon (1932) first described the physiological reaction to stress as "fight or flight". The physiological responses that prepare the organism to deal with a perceived threat are regulated by the autonomic nervous system under the control of the hypothalamus. The hypothalamus also signals the pituitary gland to secrete adrenocorticotrophic hormone (ACTH) which activates the release of numerous other hormones that play a role in the body's adjustment to threat.

In times of emergency, almost every system of the body is involved : the cardiovascular, the digestive, the muscular and the respiratory. The stress response includes an increase of blood supply primarily to the heart and muscles; there is an increase in heart rate, breathing rate and blood pressure. Concurrently, the absorption of food from the digestive system is reduced while energy-producing

substances, such as sugar and fats, are released to meet a need for an increased energy supply. The muscular system also becomes activated to meet the challenge.

The "General Adaptation Syndrome" (GAS) theory pioneered by Selye (1956; 1974) in the early 1930's describes the body's adaptation to continued stress. Basically, the stress response follows a three-stage process : the alarm response (arousal); the resistance phase (reaction); and exhaustion (See Fig. 1.1).

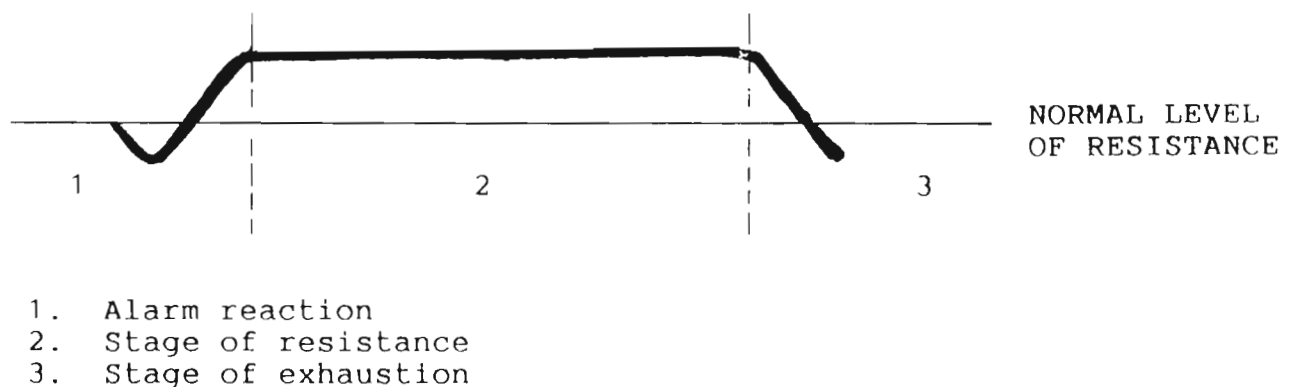


Fig. 1.1 : THE THREE PHASES OF THE GENERAL ADAPTATION SYNDROME (G.A.S.)

1. During the alarm stage, resistance drops briefly (shock phase) and thereafter increases strongly (countershock phase).

2. During the resistance stage the body's resources are mobilized to deal with the stressor. If the organism is successful, its aroused sympathetic system and increased adrenocortical secretion rates quickly return to normal. If the organism is not successful in reducing the stress, it may enter the stage of exhaustion.
3. In the exhaustion stage, the system/s appear to be overloaded with the consequent development of symptoms, thus there is a clear manifestation of stress. Selye postulates that the end result is illness or death (1974:20-23).

#### 1.2.3.2 Psychological reactions to stress

These include cognitive impairment and various negative emotions. At the cognitive level, the individual exposed to a high level of stress may have difficulty in concentrating, his/her thinking may become more rigid and irrational, and his/her problem-solving capabilities may be reduced especially when dealing with complicated cognitive tasks. According to Janis, the individual has difficulty making decisions and may display "premature closure" which may result in his/her narrowing the range of perceived alternatives, overlooking long-term consequences, inefficient searching for information, erroneous assessing of expected outcomes, and using oversimplified decision rules that fail to take account of the full range of values implicated by the choice(1982:70).

Emotional reactions produced by stressful situations may range from exhilaration (when the event is appraised as a demanding but manageable challenge) to the more common negative emotions of anxiety (both objective and neurotic), anger and aggression (both direct and displaced), and apathy and depression (which may reflect learned helplessness).

#### 1.2.4 Stress and illness

Emotional stress is believed to play an important role in more than half of all medical problems (Atkinson et al., 1987:477). Chronic stress can contribute to physical disorders such as ulcers and heart disease, and can increase the person's vulnerability to infectious diseases by impairing the functioning of the body's immune system. Type-A personality characteristics (hostile, impatient, time-pressured, and ambitious) predispose a person to heart disease.

Psychosomatic disorders are physical disorders in which emotions, e.g. chronic anxiety, are believed to play a central role. These include a wide range of common complaints such as headaches, insomnia, twitches, tics, skin rashes, digestive upsets, peptic ulcers, colitis, palpitation, high blood pressure, coronary thrombosis and infertility.

Behavioural medicine is an interdisciplinary field which seeks to discover how social, psychological and biological variables combine to cause illness and how behaviour and environments can be changed to promote health.

#### 1.2.5 Coping with stress

Coping is the process by which a person attempts to manage stressful demands. It encompasses three broad categories of coping variables : coping resources, i.e. generalized attitudes and skills that are considered advantageous across many situations; coping styles, i.e. typical, habitual preferences for ways of approaching problems; and coping efforts, i.e. specific actions (covert or overt) taken in specific situations in order to reduce a given problem or stress.

Coping has three distinct functions : to change and alleviate a difficult situation; to alter and reduce the perceived threats of the situation; or to manage the symptoms of stress arising out of the situation (Pearlin, 1983:28).

In coping with stress-provoking situations, people typically use a combination of problem-focused strategies which aim to change the situation in some way, and emotion-focused strategies which aim to reduce anxiety without dealing directly with the source of the problem. Problem- and emotion-focused coping include both cognitive and



behavioural strategies. Some emotion-focused strategies that distort reality are called defense mechanisms. They include repression, rationalization, reaction formation, projection, intellectualization, denial and displacement.

Three key criteria for determining the effectiveness of coping efforts in confronting stress are : reductions in emotional distress or upheaval; resolution of or reduction in problems; and maintenance of self-worth (Menaghan, 1983:171).

#### 1.2.6 Individual Characteristics in Mediating the Experience of Stress

There are important differences in the way individuals appraise, react to and cope with potential sources of stress. Some persons are highly vulnerable to stress, while others are more stress-resistant. These differences reflect the influence of a large number of individual characteristics. They include the following :

1. extent of the individual's behavioural skills repertoire (assertiveness, problem-solving, conflict resolution);
2. the extent and outcome of one's past experience with similar stress;
3. the individual's physical condition and mental state;
4. the extent, availability and quality of one's social support;

5. personality factors (self-esteem, flexibility-rigidity, Type-A behaviour patterns; lack of control);
6. the ability to predict the occurrence of a stress-provoking event;
7. how constrained the individual typically is by social, cultural or organizational norms;
8. the intensity and extent of other chronic life events (Burke and Weir, 1980:326-327).

#### 1.2.7 Occupational Stress

As with general stress, there have been a number of approaches to defining the concept of "occupational stress". Consistent with the interactional approach Margolis and Kroes, for example, define it as a condition at work interacting with worker characteristics to disrupt psychological or physiological homeostasis (1974:659-661).

In offering a stimulus-based definition, Caplan et al. (1975:3) view job stress as any characteristic of the work environment which threatens the individual by (a) demands that cannot be met because they exceed the person's abilities and skills; and (b) the inadequacy of the job in fulfilling the person's needs.

In both definitions outlined above, it is the interaction of the person with his/her environment that is critically important in the generation of stress. All types of occupational settings are likely to be sources of stress

because they provide a context in which performance and relationship demands are made. The employee's perception of the demands (internal or external) as a threat and his failure or success in coping with the demand will determine the effects of a stressor.

Internal demands are a reflection of the person's desired goals, values, needs and commitments.

External demands may reflect different aspects of the person's work, such as the tasks which go to make up that job and the way in which they are organized, the physical work environment (e.g. temperature, noise, illumination), the psychosocial environment, and out-of-work activities.

Psychosocial demands are often related to the concept of roles and discussed in terms of the following factors : role conflict, role ambiguity, role overload and responsibility. According to Warr and Wall (1975:146), the word "role" is borrowed directly from theatrical usage and refers to "behaviour which is attached to certain positions rather than to the individuals who hold these positions". Roles are norms that apply to categories of people. Thus different roles have different sets of demands associated with them.

Job satisfaction is an important measure of the quality of working life. Locke (1976) used salient aspects of Maslow's "need hierarchy" theory of human nature as well as

Herzberg's "two-factor theory" concerning job satisfaction and dissatisfaction, to formulate his own hypothesis of job satisfaction. Locke suggests that job satisfaction results from a critical appraisal of one's job in terms of one's needs and values. Such needs are of two distinct, but interacting types : (a) physical needs; and (b) psychological needs, especially the need for personal growth. The most important factors relating to job satisfaction are :

1. mentally challenging work, which the individual can cope with successfully;
2. personal interest in the work itself;
3. rewards for performance which are consistent with the individual's aspirations;
4. working conditions which allow the job to be completed satisfactorily and which are not physically demanding;
5. high self-esteem on the part of the individual, and
6. basic values which are not violated by the above needs.

If some or all of these criteria are not met then dissatisfaction with the job may result. The consequences could then include physical and psychological ill-health, poor labour relations and productivity, high labour turnover and absenteeism, and high accident rate.

Cooper and Marshall (1976:11-28) list the following as potential sources of stress in the occupational environment:

characteristics of the job itself (poor physical conditions, time pressures); roles in the organization

(role ambiguity, role conflict, including role overload and responsibility for people); career development potential (underpromotion, lack of job security); interpersonal relationships at work (poor relations with boss, subordinates, and colleagues); the climate and structure of the organization (level of participation in decision-making, office politics); and problems associated with the interface between the organization and the outside world. Each of these categories will be considered in greater detail when the researcher reviews the literature on occupational stress in Chapter Two.

#### 1.2.8 Teacher Stress

Here too, definitions of teacher stress, a specific form of occupational stress, have emphasized the person-environment interaction. The focus is on the demands or pressures on teachers, their reactions to these demands and the coping resources they use in attempting to manage stress.

Needle et al. see teacher stress as arising from "the discrepancy between the teacher's needs, values and expectations on the one hand and occupational rewards or job demands and the capacity of the worker to meet these requirements on the other" (1980:96).

In contrast to the above definition, Kyriacou and Sutcliffe define teacher stress as "a response syndrome of negative affect (such as anger or depression) by a teacher usually

accompanied by potentially pathogenic physiological and biochemical 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 self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat" (1978a:2).

This definition conceptualizes teacher stress as negative and potentially damaging to the teacher's health. The key element in the definition is the perception by the teacher of threat to his/her self-esteem and mental well-being. Because of its nature the teaching situation has the potential for being a fertile breeding ground for stress. Each day the teacher has to interact with a multitude of pupils, colleagues, parents and administrators who pose many and various demands. If the teacher *perceives* that meeting certain demands will be difficult or impossible, and that failure to do so will threaten his/her mental or physical well-being, then he/she is very likely to experience stress. Kyriacou (1989:28) points out that the demands may be internal or self-imposed as well as imposed by others, just as the judgements about meeting the demands successfully may be based on the teacher's own criteria as well as those of others.

Meeting job demands is very dependent on the skills and strategies that teachers have in dealing with their circumstances. According to Cherniss (1980:48) a primary

concern or need of teachers (and other human service workers) which is of great psychological significance is the demand for competent, effective performance. There are two reasons for this. Firstly, teaching involves direct responsibility for the well-being of other people, viz. the pupils. Secondly, because of the teacher's greater psychological investment in his career, his identity and self-esteem merge with his work. Unfortunately, there are several features of teaching that make the attainment of competence and efficacy elusive and frustrating. Some of these are :

- lack of feedback from pupils;
- lack of active co-operation and assistance by pupils in the teaching-learning process;
- the teacher's lack of control over many of the forces (often destructive) that shape the world in which pupils live (Cherniss, 1980:51-54).

Lortie believes that teachers are attracted to their profession because they perceive their role as being an "essential catalyst of student effort and learning" and that teacher satisfaction is closely tied to "achieving results with students" and feeling that one has "influenced students" (1975:185). However, factors such as student misbehaviour, time pressures and interpersonal conflicts often prevent teachers from realizing their aim, i.e. actual teaching, and they consequently experience stress.

Stress and conflict may also arise from other job experiences such as the consequences of low-level rewards (e.g. inadequate salary) or the absence of occupational rewards. Furthermore, accelerated social changes and the increasing complexity of education have resulted in increasing contradictions in the role of the teacher. For instance, society now demands that the teacher combines the various roles of friend, colleague, companion and helper in the development of the pupil. This position, however, is incompatible with the teacher's role of selector and evaluator. Another frequent contradiction arises when the teacher attempts to reconcile the demands of individualized instruction with the demands of social integration.

Faure (Esteve, 1989:11) points out that for the first time in history, society is not asking those who educate to prepare the new generations for conditions which exist at present, but for the needs of a future society which, as yet, does not exist. The result is that teachers have to live with "endemic uncertainties" not only in respect of their role-functions and the educational outcome itself, but uncertainties about the objectives of the education system and the furthering of knowledge.

Surveys indicate that occupational stress levels among teachers appear to be high in comparison with managers in industrial organizations and various other types of white-collar workers (Cox and Brockley, 1984:83-84).



Teachers also share high "burnout" rates with members of the police force, social workers, nurses and other human service professionals.

In teaching, stress appears to be an inherent feature of the job itself. The findings of a number of studies conducted in the United Kingdom (Dunham, 1984; Kyriacou and Sutcliffe, 1978b, 1979a), the U.S.A. (Blase, 1982, 1986; Farber, 1984), Australia (Otto, 1986), and other countries support this view.

Recent research findings indicate that the incidence of stress among both beginning and experienced teachers is high (Cherniss, 1980; Cole and Walker, 1989; Dunham, 1984; Dworkin et al., 1990; Fimian and Blanton, 1987; Needle et al., 1980; Otto, 1986; Phillips and Lee, 1980).

Recent findings also indicate that the correlates and consequences of stress - including exhaustion, depression, estrangement from work, powerlessness, alienation, burnout, depersonalization, and the meaninglessness of work - are common among both beginning and experienced teachers (Cedoline, 1982; Cherniss, 1980; Cole and Walker, 1989; Dworkin, 1985, 1987; Dunham, 1984; Otto, 1986).

### 1.2.9 Stress and Burnout

Stress differs from burnout in fundamental ways. According to Selye's (1974) physiological or response-based approach to stress, there are two forms of stress : the positive form, or eustress, which is beneficial and therapeutic as it provides individuals with the incentive, motivation and challenge to achieve; and the negative form, or distress, which originates from unpleasant experiences. Burnout is associated with the latter type as it is a response to chronically threatening and distressful work situations. It is particularly prevalent among human service professionals such as social workers, teachers, administrators, psychiatrists, nurses and police officers because of the demands and characteristics of the jobs of these workers (Cherniss, 1980; Brookings et al. 1985; Farber, 1984a, b; Maslach, 1982; Saros, 1988).

Freudenberger defines burnout as "a state of physical and emotional depletion resulting from conditions of work" (1974:160). Maslach (1982) calls burnout a syndrome because it consists of three inter-dependent and negative feelings and attitudes called Emotional Exhaustion, Depersonalization, and Personal Accomplishment burnout.

The interactional or transactional perspective of stress is an extension of Selye's conceptualization, since it takes into consideration the intricate transaction between human needs and organizational demands. The interactionalist

McGrath (1970,1976), for instance, proposes that when work demands exceed an individual's perceived capabilities and resources to meet these demands, and when it is important that the person meets such demands, distress occurs. This is characterized by feelings of exhaustion, floating anxiety and reduced levels of self-confidence. However, persistent experiences of distress deplete the individual's reserves of adaptation energy (Selye, 1974:14) and may contribute to burnout. From the interactional perspective, therefore, burnout destroys and debilitates not only the individual, but the organization as well.

In the present study the researcher investigates the problems of stress among teachers in Indian secondary schools within the more comprehensive framework of the interactional perspective. Hence, it is assumed that stress arises from a "lack of fit" between teachers and their environment, and that this involves a process of continuous interaction in which teachers are not only affected by the school and broader social environment, but continually "act back on it", employing a range of coping modes to protect themselves against its impact. Furthermore, it is acknowledged that the consequences of stress can be positive or negative, depending on how successful the teacher's coping efforts are. Unsuccessful coping can result in interference with school adjustment, adaptation and effective teaching.

The intention of the foregoing has been to provide the reader with a general background in respect of three important aspects related to this study, viz. the stress phenomenon, occupational stress and teacher stress. These aspects will be considered in greater detail in the overview of the stress literature in Chapter Two.

### 1.3 MOTIVATION FOR THE STUDY

From what has already been said, it becomes obvious that teaching is a demanding job at the best of times, with a potential for considerable stress.

Available data increasingly indicate that stress within the teaching profession may affect the school as an organization, teacher performance and productivity, as well as the physical and mental well-being of the teacher and his/her family. Currently increasing pessimism, low morale and feelings of lack of administrative support are being reported by teachers. Teachers also complain of fatigue, an inability to cope with their workload, and boredom with the routine of the job.

If stress is a threat to the physical and mental health of the teacher, then it is important that every effort be made to understand its nature, its causes and effects. Measuring stress in teaching is therefore an important step in gathering information about this phenomenon. Unfortunately, this has been a much neglected area of research in Indian

education. In this respect it is important to remember that while we are committed to improving educational outcomes for students, we must at the same time not risk losing sight of the needs of teachers.

It is anticipated that the present study will be of benefit to teachers, administrators, teacher educators, decision-makers as well as others interested in education. An identification of the main sources of stress currently experienced by Indian teachers should enable decision-makers and administrators to monitor the effects of the existing system, and to develop a greater awareness of those areas and policies in education which may call for modification or change. This can then help in the designing of appropriate remedial techniques aimed at improving the quality of teachers' working lives so that they can become more effective and productive in the teaching-learning situation.

It is hoped that this study will also be of benefit and interest to teachers generally by providing them with insight into stress as experienced by themselves and their colleagues so that they can develop better strategies for coping with the pressures of teaching as well as provide support to their colleagues. The researcher believes that her experiences and observations during her twenty-six years as a member of the teaching profession will stand her in good stead when investigating this subject on stress among teachers.

Finally, it is hoped that this study will make a meaningful contribution towards increasing our existing body of knowledge about stress in teaching and that its findings will engender enough curiosity so that they become the basis for further inquiry by research workers of the future.

#### 1.4 AIMS OF THE PRESENT STUDY

Considered against the background that has been given above, the aims of the present study may be stated as follows :

1. to determine the incidence of self-reported stress among teachers in Indian secondary schools;
2. to determine the relationship between the incidence of teacher stress and the following demographic characteristics: sex, marital status, age, teaching experience, academic qualification, and position held in school;
3. to investigate the extent to which job-related tasks and situations create stress in teachers;
4. to identify those role-related situations which are mainly responsible for the stress experienced by teachers;
5. to identify some of the commoner symptoms experienced by teachers in times of acute stress;
6. to identify those behaviours and actions on which teachers commonly rely in their attempts to cope with stress;

7. to compare the responses of "stressed" and "relatively less stressed" teachers on items related to psychological functioning;
8. to identify those aspects of the work situation which, according to teachers, give them (a) most satisfaction and (b) least satisfaction.

#### 1.5 RESEARCH PROBLEMS TO BE INVESTIGATED

Flowing out of the above-mentioned aims, the study was designed to provide answers to the following questions :

- 1.5.1 What is the incidence of self-reported stress among Indian secondary school teachers? (Question 18)<sup>1</sup>
- 1.5.2 Do intra-group comparisons of the following subsamples of teachers show significant differences with regard to the incidence of perceived stress : male vs female; married vs unmarried; older vs younger; more experienced vs less experienced; graduates vs diplomates; high rank vs low rank (Items 1 - 6)
- 1.5.3 To what extent do selected job-related tasks and situations create stress in teachers? (Question 10)

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1. The item number given in parenthesis corresponds to the question number on the Teacher-Occupational Inventory (TOI) used in this study (Appendix A).

- 1.5.4 Which role-related situations do teachers identify as contributing most to feelings of perceived stress? (Question 11)
- 1.5.5 What are some of the commoner symptoms experienced by teachers in times of acute stress? (Question 12)
- 1.5.6 On which behaviours and actions do teachers commonly rely in their attempts to cope with stress? (Question 13)
- 1.5.7 Do "stressed" and "relatively less stressed" teachers differ significantly in their responses to items related to psychological functioning? (Question 14)
- 1.5.8 What are the aspects of their work situation which give teachers (a) most satisfaction? and (b) least satisfaction? (Questions 15, 16 and 17)

In answering these questions the quantitative analysis will be supplemented by qualitative data obtained through in-depth interviews.

## 1.6 OUTLINE OF THE PRESENT STUDY

The researcher decided to include in her survey all the major components of teacher stress : prevalence, sources, symptoms, coping actions and behaviours, as well as a health scale. The intention here was to obtain a global picture of the nature and extent of the stress problem among Indian teachers.



In Chapter Two, the theoretical and research literature pertaining to stress in general, and occupational and teacher stress in particular will be reviewed. Particular attention will be paid to the various theories and models of stress research which have relevance for this study, as well as research relating to the prevalence, sources and manifestations of stress among teachers, their modes of coping as well as the relationship between perceived stress and health.

The methodology employed in the present study will be considered in greater detail in Chapter Three. The following aspects will, *inter alia*, be dealt with : the construction of the questionnaire, selection of the sample, the administration of the questionnaire, and the in-depth interviews.

The findings of the study will be presented in Chapters Four and Five.

Data for the present study will be gathered using both descriptive and inferential techniques.

The conclusions, recommendations and educational implications of the findings of this study will be presented in Chapter Six.

## CHAPTER TWO

### A REVIEW OF THE LITERATURE PERTAINING TO THE STUDY OF STRESS

Since Selye first introduced the concept of stress with his "General Adaptation Syndrome" theory in the 1930's, there has been a proliferation of literature in the field of stress, with Beech, Burns and Sheffield reporting over 110 000 scientific publications related to stress (1982:10). Most studies of stress have focused on one of three areas : stressful life events, personal predispositions to stress, or social conditions related to stress.

Along with the expanding literature has come a multidisciplinary interest in the stress process resulting in a wide range of definitions, theories and models of stress, all of which have helped to influence our thinking not only about stress in general, but about occupational stress and teacher stress in particular. The aim of the present chapter is to review some of the literature in these three areas. Because the literature in stress research is so vast, an attempt will be made to focus mainly on those aspects which are relevant to the present study.

The literature survey which follows will therefore be organized around the following three areas :

2.1 Theoretical approaches to the study of stress;

2.2 Occupational stress; and

2.3 Teacher stress.

## 2.1 THEORETICAL APPROACHES TO THE STUDY OF STRESS

There are three major approaches to understanding the nature of stress (Cox, 1978 : 3-25; Fisher, 1986 : 7-12). These are :

2.1.1 Stimulus-based approach

2.1.2 Response-based approach

2.1.3 Interactional approach

These approaches have already been discussed briefly in Chapter One, but will now be considered in greater detail.

### 2.1.1 Stimulus-based approach

According to this approach disturbing or disruptive stimuli (i.e. stressors) in the environment lead to strain within the individual. These stimuli may be environmental (e.g. noise), social (eg. racism), psychological (e.g. depression), physical (e.g. disability), economic (e.g. poverty), or natural disasters (e.g. floods). Over a period of time the levels of the stressor could lead to stress reactions.

Occupational stress research often uses this approach to isolate factors in the work situation which are detrimental to employees.

The stimulus-based approach has been criticized for not giving sufficient attention to individual differences in the way in which stress is perceived, in tolerance thresholds, and in responses to stress (Cox, 1978 : 17; Dunham, 1984 : 1-2). This approach, moreover, views the stress-strain relationship as a static phenomenon in which individuals respond automatically to environmental changes, rather than as a transactional relationship with intervening psychological processes.

#### 2.1.2 Response-based approach

This approach views stress as an individual's response or pattern of responses to stressors in the environment. The stress responses may occur at three major levels: psychological (e.g. anxiety, poor self-concept); physiological (e.g. respiratory illness, peptic ulcers, headaches, insomnia and some cardiovascular diseases); or behavioural (eg. deterioration in work performance or interpersonal relationships, absenteeism). These three levels are interrelated, although the exact relationships are not known (Schuler, 1980).

This view of stress received its initial impetus from the work of Selye (1956, 1974). He defined stress as "the non-specific response of the body to any demand made upon it" (Selye, 1974:55). Selye attempted to demonstrate how *any* stressor may lead to "diseases of adaptation" via a particular defensive physiological pattern of responses,

called the "General Adaptation Syndrome" (GAS). This includes three stages : an alarm reaction, a stage of resistance and a stage of exhaustion. This set of responses prepares the individual for physical activity, usually "fight or flight". If the stressor is severe or prolonged, "diseases of adaptation" such as stomach or intestinal ulcers and increased susceptibility to infection may occur and eventually, if the stressor is unabated, the organism may die.

A basic problem with response-based approaches to stress is distinguishing between responses that are part of the stress response and those that are not (Fisher, 1986:9; McGrath 1970:12). A stress response may also be dissociated in time from the source of the problem - for example, a person may respond to a stressor before the actual event or long after the event has passed.

Moreover, as with the stimulus-based approach, the response-based approach does not take interactions sufficiently into consideration. Whether a particular potential stressor will evoke a response will depend on a number of interacting factors such as the nature and intensity of the stimulus, characteristics of the individual, past experience, the context in which the stressor appears, and the adaptive coping skills utilized by the individual.

### 2.1.3 Interactional Approach

In contrast to the stimulus- and response-based approaches, which view stress as either an environmental demand or a response, and the individual as essentially passive in the operation of stress, the interactional approach is cognitive-phenomenological since it emphasizes the active role of the individual in mediating potential stressors in the environment. Psychological processes play a crucial role in determining stress. Thus stress is no longer seen as a static phenomenon but rather as a dynamic, complex process (Pearlin et al., 1981 : 352).

In order to deal with stress, the person may attempt either to alter his environment or to learn ways of changing his reactions to a particular situation. Coping occurs when a state of fit between the person and environment is reached (Woolfe, 1984:141).

#### 2.1.3.1 Interactional Theorists

Since the present study needs to be seen in terms of the interactional paradigm, the views of three important interactional theorists - McGrath; Lazarus; and Cox - will now be presented.

##### 2.1.3.1.1 McGrath

McGrath proposes a demand-capacity interactional model of

stress. He views stress as *"a perceived substantial imbalance between demand and response capability, under conditions where failure to meet demand has important perceived consequences"* (1970:20).

Implicit in McGrath's definition is the assumption that stress occurs if there is an imbalance or *"lack of fit"* between demands and the individual's capacities (e.g. skills, aptitudes and beliefs about the situation) to respond to these demands. A further assumption is that the perceived consequences anticipated from meeting the demand or failing to meet the demand must be substantial and that these consequences are a result of the person's perceptions of high versus low rewards and/or low versus high costs (Bailey and Bhagat, 1987 : 207-208).

In his conceptual framework for research on psychosocial stress, McGrath (1970 : 15-17) argues that the organism or *"actor"* can be at any of the various system levels - individuals, groups or organizations. The stress problem involves four stages of events, i.e. the demand imposed by the environment, the subjective demand appraised by the organism, the organism's response/s, and lastly, the consequences of response. The intervening psychological processes of the individual have potential influence at all four stages.

#### 2.1.3.1.2 Cox

Cox (1978 : 18-21) proposes a five-stage transactional model of stress which emphasizes psychological processes, feedback components and a cyclical process. The five stages are:

- a) demands created by both the external and internal environment;
- b) the person's perception of the demand and his coping ability;
- c) the use of various coping strategies which the person has available;
- d) the consequences of coping; and
- e) feedback between the various stages, allowing for the consequences of success or failure to influence the perception of demand and the capacity to cope.

#### 2.1.3.1.3 Lazarus

According to Lazarus stress arises when the environment is appraised by the person as taxing or exceeding his resources and endangering his well-being. The key concepts in his theory are "*cognitive appraisal*" and "*coping*". In any stressful encounter, the person evaluates whether a situation is damaging or potentially damaging on the basis of his understanding of the power of the situation to produce harm as well as the resources he has available to neutralize or tolerate the harm.



Lazarus distinguishes between three types of appraisal :

- a) Primary Appraisal where there is an evaluation of the significance of an event for one's well-being as either stressful, benign-positive, or irrelevant.
- b) Secondary Appraisal where there is an evaluation of coping resources and options in response to a stressful event. Cohen and Lazarus (1979: 221) identify five major modes of coping: information seeking; direct action; inhibition of action; intraphysic processes which include the defence mechanisms; and turning to others for help.
- c) Reappraisal which refers to the changes in a person's evaluative judgements as new information (feedback) is obtained. Flowing out of this, new perceptions or coping responses may emerge, and the appraisal process may start again.

Lazarus and Launier (1978) identify the two main functions of the coping process as a problem-solving function and a palliative or emotion-regulating function.

These coping resources may change over time depending on the person's degree of stress, as well as the demands of the various life stages. Throughout their discussion of stress, Lazarus and Launier emphasize "*a transactional mediational, time-oriented, and process-oriented perspective*" (1978:321).

Because of the comprehensive nature of the interactional model, it provides direction for research concerning the nature of stress (including job stress) and for the development of stress management intervention programs. Such programs can be directed at altering environmental conditions, cognitive appraisal and/or physiological or behavioural reactions (Forman and Cecil, 1986:205).

Burke and Weir (1980:301) are of the opinion that the interactional approach is particularly suited for stress research at management and professional levels of organisations (such as teaching) where individual perceptions and appraisals of one's internal and/or external environments are seen as having a significant role in the experience of stress.

## 2.2 OCCUPATIONAL STRESS

### 2.2.1 Definition

Most current investigators and authors working in the area of job stress view the problem in terms of an interaction between the individual and the organization. For example, Beehr and Newman (1978:670) define job stress as *"a situation wherein job-related factors interact with a worker to change (i.e. disrupt or enhance) his or her psychological and/or physiological condition such that the person (i.e. mind-body) is forced to deviate from normal functioning"*. This definition implies that job stress not only may arise

from both positive and negative conditions, but that it may have beneficial and negative effects on the employee's mental and physical well-being. Time plays an important role in this conceptualization. Therefore, although an individual's job may be a stressor agent, his reaction to that stressor may occur immediately or at a later time and place in the future.

### 2.2.2 Occupational Stress, Employee Health and Productivity

Occupational stress, and its relationship to both individual and organizational outcomes, has become an increasingly important area of study in recent years. It is generally acknowledged that employee health is not only just as important as other work-related events such as job performance, but that it is also affected by social and psychological events.

The National Institute for Occupational Safety and Health in Britain currently considers stress to be one of the ten leading work-related health problems (DeFrank and Stroup, 1989:99). Several researchers have demonstrated that organizationally-based stress not only affects workers' levels of efficiency and productivity, but also leads to psychological and somatic strain (Bedeian et al. 1981; Beehr and Newman, 1978; Cherniss, 1980; Cooper and Payne, 1978; French, Caplan and Van Harrison, 1982; Murphy, 1984; Matteson and Ivancevich, 1982, 1984; Quick and Quick, 1984).

In recent years there has been greater corporate involvement in promoting employee health through a variety of programmes aimed at enhancing productivity, lowering medical and disability costs, reducing absenteeism and turnover, and improving satisfaction and morale among workers (Murphy, 1984:1).

### 2.2.3 A Categorization Framework of Occupational Stress

Various researchers have proposed comprehensive models of organizationally-based stress that might affect workers' levels of efficiency, effectiveness and satisfaction (Cherniss, 1980; Cooper and Marshall, 1976; French and Caplan, 1972). While the categories identified vary, all are based on the assumption that there are some constant, repetitive and identifiable sources of stress that exist across a wide variety of occupations.

The categorization framework which was developed by Cooper and his associates (Cooper, 1978, 1983; Robertson and Cooper, 1983) is an interactional framework (see Figure 2.1) which encompasses seven source categories, five that are organizationally based and two that are individually based. This framework has relevance for the present study since it helps one to understand the roots of teacher stress in educational organizations.

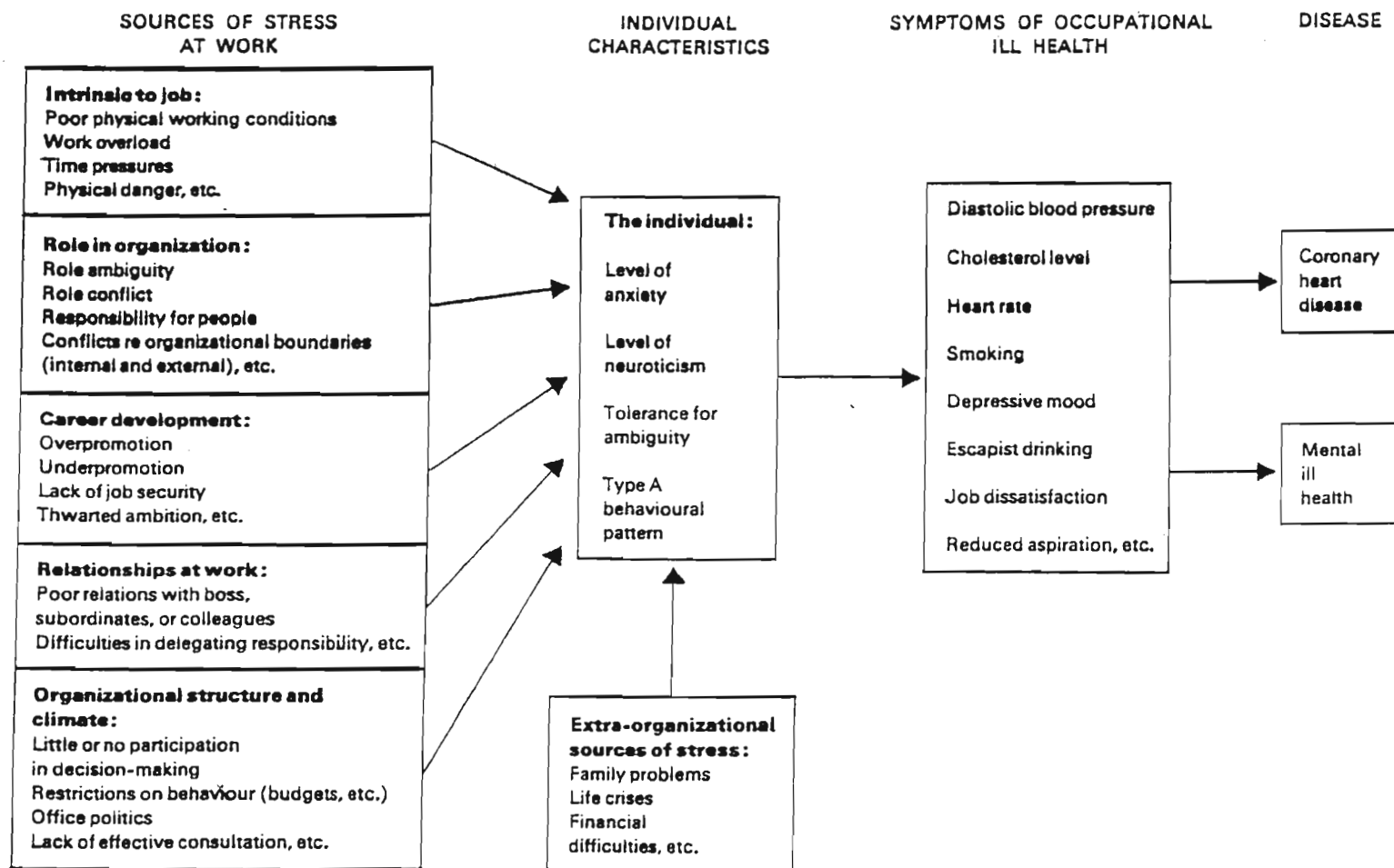


Fig. 2.1 : A MODEL OF STRESS AT WORK  
From Cooper, C.L. & Marshall, J. (1976)

Cooper and his associates hypothesize that occupational stress originates from one or a combination of the following three sources :

- the work environment;
- extra-organizational sources; and
- the characteristics of the individual.

In any work environment the sources of stress may arise from:

- 1 Factors intrinsic to the job itself;
- 2 Role of the person in the organization;
- 3 Interpersonal relationships at work;
- 4 Career development pressures;
- 5 Organizational climate and structure;
- 6 Extra-organizational sources of stress
  - 6.1 Home-work pressures
- 7 Characteristics of the individual.

Each of the above categories will now be discussed in greater detail.

#### 2.2.3.1 Factors intrinsic to the job itself

Stressors include poor working conditions and work overload. Work overload may be quantitative (i.e. having too much to do) or qualitative (i.e. work being too difficult) and may produce symptoms such as job dissatisfaction, job tension,

low self-esteem, threat, high cholesterol levels, increased heart rate, and smoking (French and Caplan, 1972). Cooper (1978:290-291) cautions against ignoring the interactive relationship between job and employee. For example, objective work overload should not be viewed in isolation, but in relation to the individual's capacities and personality.

#### 2.2.3.2 Role in the organization

Stressors in this category include role ambiguity, role conflict, role overload, and responsibility for people.

Role ambiguity exists when there is a lack of clarity about the objectives, expectations, scope and responsibilities of the work role. The stress indicators are lower job satisfaction, higher job-related tension, lowered self-esteem, lower motivation to work, ineffective coping, and intention to leave the job (Kahn et al., 1964; Cooper and Marshall, 1976:16; Jackson, 1983:5; Bedeian et al., 1981:254-258).

Role conflict exists when there is incompatibility in the requirements or demands of the work role. Rizzo et al. (1970:155) distinguish between four kinds of conflict :

- a) conflicts between the person's internal standards or values and the defined role behaviour, i.e. a person-role conflict;

- b) conflict between the time, resources, or capabilities of the person and defined role behaviour;
- c) conflict between several roles for the same person which require different or incompatible behaviours, or changes in behaviour as a function of the situation, i.e. role overload;
- d) conflicting expectations and organizational demands in the form of incompatible policies, conflicting requests from others, and incompatible standards of evaluation.

Role conflict has been linked to less job satisfaction, more tension, poor performance and poor relationships among co-workers (Bedeian et al., 1981; Kahn et al., 1964. According to Cooper and Marshall (1976) occupations of a lesser physical nature such as managerial, clerical and professional are more prone to occupational stress related to role conflict.

Research evidence suggests that individuals with different personality characteristics or in different organizational or job situations, or at different levels of an organization may respond differently to role conflict, role ambiguity and/or overload (Beehr, Walsh & Taber 1976; Cooper 1983; Schuler, 1975).



La Rocco and Jones (1978:629-634) found that social support, whether from one's supervisor or peers, did not appear to be an effective means of removing the negative influences of stress produced by role conflict and ambiguity; rather, the sources of conflict needs to be addressed directly.

Several studies (French and Caplan, 1970; Wardwell et al, 1964) have found that jobs that involve responsibility for people (as in teaching) are potentially more stressful than jobs that involve responsibility for things (such as equipment and budgets) and that they are more likely to lead to coronary heart disease. A probable reason for this is that responsibility for people frequently requires spending more time interacting with others, attending meetings, working alone, and trying to meet deadline pressures (Cooper and Marshall, 1976).

#### 2.2.3.3 Relationships at work

A number of writers have suggested that good supportive relationships among colleagues and superiors promote individual and organizational health (Cohen & Willis, 1985; Dworkin et al., 1990; Jayaratne et al., 1988). French and Caplan (1972) define poor relations as *"those which include low trust, low supportiveness and low interest in listening to and trying to deal with problems that confront the organizational member"*. In their studies, Kahn et al. (1964) and French and Caplan (1970) found that role ambiguity was prominent when colleagues distrusted one

another. This led to inadequate communications between people, low job satisfaction and feelings of job-related threat to one's well-being.

In his investigation of the subordinate-superior relationship, Buck (1972) found that the lack of considerate behaviour of supervisors contributed significantly to feelings of job pressure and other negative feelings among workers.

#### 2.2.3.4 Career development pressures

Cooper (1978:295) identifies two major clusters of potential stressors in this area :

- a) lack of job security, fear of redundancy, obsolescence or early retirement; and
- b) status incongruence (under- or over-promotion, frustration at having reached one's career ceiling).

For professionals and managers, career progression is of crucial importance. By promotion they earn not only money, but also enhanced status and new job challenges.

In their investigation of career development blockages, Cooper and Davidson (Cooper, 1983:373) found that women suffered significantly more than men on a range of organizational stressors. These include sex discrimination

in promotion, inadequate training, male colleagues being treated more favourably, and not enough delegation of duties to women.

#### 2.2.3.5 Organizational structure and climate

Stress-related issues in this category concern threats to an individual's freedom, autonomy and identity. They include factors such as office politics, lack of effective consultation and communication, lack of participation in the decision-making process, close supervision, no sense of belonging, lack of support, and restrictions on behaviour (e.g. through tight budgets).

Poor mental health and job dissatisfaction have been linked to close supervision, no autonomy at work, non-participation in decision-making, and lack of recognition for good performance (Kasl, 1973; Cooper, 1978:297; Buck, 1972).

Burke (1976:243) states that the amount and type of organizational support provided to employees under pressure makes a considerable difference in the quality of their coping efforts.

#### 2.2.3.6 Extra-organizational sources of stress

There are a variety of stressors in the home and social environment which can affect the individual in the work environment and vice versa. These include family problems,

life crises, financial difficulties, lack of social support, the conflict of the organization with family demands, and societal pressures.

#### 2.2.3.6.1 Work-Family Conflict

The traditional family model of the husband as breadwinner and the wife as homemaker is becoming a vestige of a past society. The economic pressures of inflation and the social psychological need to develop one's self-identity are encouraging women to take a more active role outside the home, to pursue full-time careers, and to participate more widely in society in general (Hall & Hall, 1980:243; Duxbury & Higgins, 1991:60).

A comparison of the census statistics for the years 1980 and 1985 supplied by the R.S.A Central Statistical Service indicates that during this period there has been an overall increase of 12,58% of economically active women among the four population groups in the Republic of South Africa. In the case of Indian women the increase has been 27,21%.<sup>1</sup>

For many couples, co-ordinating work and family roles can become a serious source of stress. Women are increasingly being forced to deal with job-related demands that limit their performance of family roles. Men are becoming more involved with their families, and their priorities are

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1. Statistics obtained from Mr. D. Sawyer from Central Statistical Service in August 1991.

shifting away from work. Together, these trends are resulting in increased levels of work-family conflict as men and women try to balance the conflicting demands of work and family (Duxbury & Higgins, 1991:60).

According to Cooper (1978:298) the individual worker has two stress-related problems with respect to his/her family and work. The first is that of managing time and conflicting commitments. The second problem, often a result of the first, is the spill-over of crises or stresses in one system to affect the other. For example, pressure from the workplace such as fear of job loss, blocked ambition and work overload can have a detrimental effect on families of employees, causing them to feel insecure and tense, while family problems can have a negative effect on job performance.

Work-family conflict is an important concern for individuals and organisations alike because such conflict, as a source of stress, has been correlated with negative consequences, including increased health risks for employed parents, poorer performance of the parenting role, decreased productivity, tardiness, absenteeism, turnover, poor morale, reduced life satisfaction, and lower mental health (Greenhaus & Beutell, 1985; Duxbury & Higgins, 1991; Baruch et.al., 1987)

### 2.2.3.7 Characteristics of the Individual

#### 2.2.3.7.1 Individual Differences in coping with stress

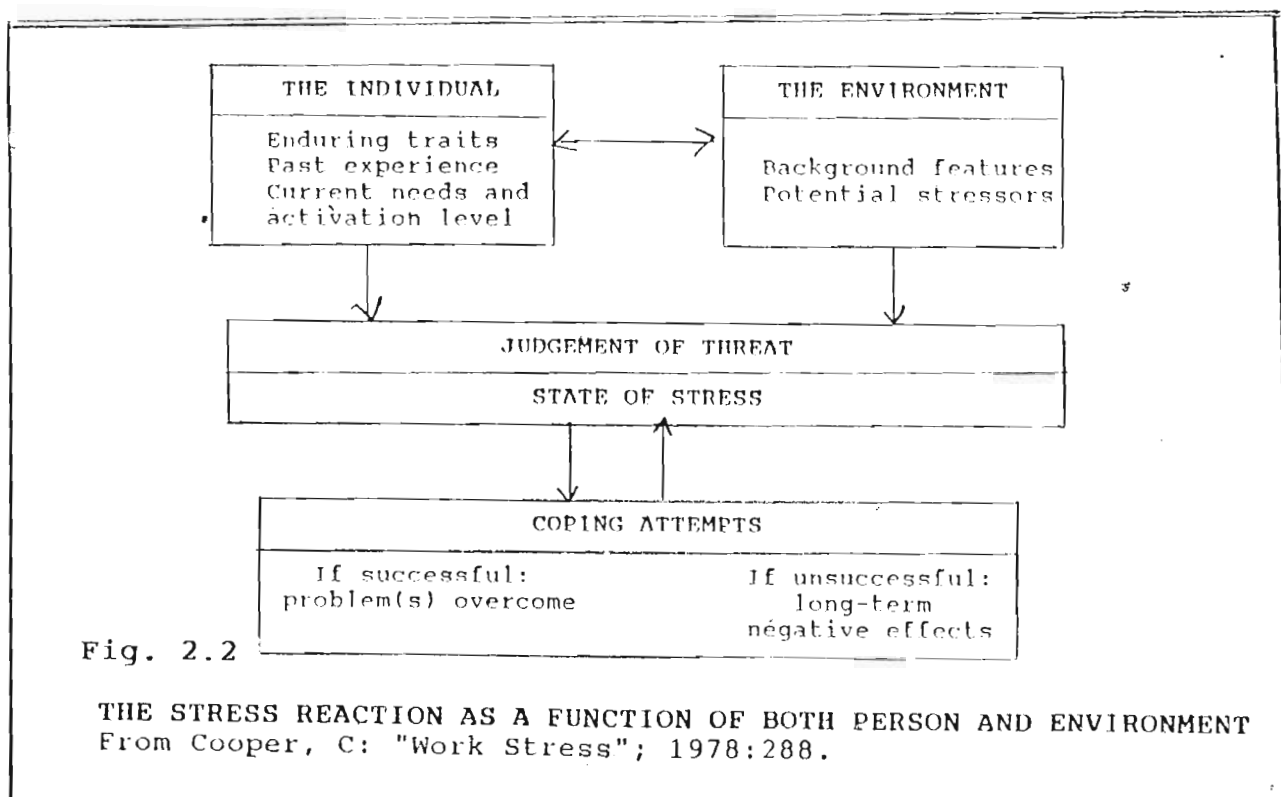
Sources of pressure at work evoke different reactions from different people. Some people are better able to adapt their behavior in order to cope with stress-provoking situations than others.

Many factors may contribute to this variance in stress reactions. These include personality, motivations, competence to deal with problems in a particular area of expertise, fluctuations in abilities (particularly with age), and insight into one's own motivations and weaknesses (Cooper, 1978:228).

Individuals with Type-A behavioural patterns, for instance, have been found to be significantly at risk of contracting coronary heart disease as opposed to Type-B persons. Type-A people show the overt behavioural syndrome or lifestyle characterized by extremes of competitiveness, striving for achievement, aggressiveness, haste, impatience, restlessness, hyper-alertness, explosiveness of speech, time urgency, and a tendency to suppress fatigue in order to meet deadlines.

#### 2.2.4 Consequences of stress

The interactional view to stress holds that the work environment *per se* is not inherently stressful; rather it is the relationship of the person and the environment that can result in stress. Using this approach, modern researchers are now paying increasing attention to assessing how the characteristics of the individual (employee) and those of the situation (work or job) work simultaneously and in interaction to produce stress and physiological, psychological and organizational consequences (Fig. 2.2). Thus, for example, in studies investigating job stress and Type-A behaviour, the focus of researchers has been on examining how job stress and Type-A behaviour jointly affect the well-being of employees as well as that of the organization (e.g. Ivancevich et al., 1982, Ivancevich and Matteson, 1984).



#### 2.2.4.1 Individual consequences

If individuals are unable to cope effectively with the demands made on them, they will exhibit signs of distress. Depending on the nature of the stressor, the individual, and various mediating variables, the responses of individuals to stress may be grouped into one or more of the following categories :

i) Emotional Manifestations

These may vary from undefined anxiety, dissatisfaction and anger to reactions of fear and frustration.

ii) Behavioural Manifestations

In extreme cases stress can lead to behavioural problems such as appetite disorders, excessive smoking, alcohol and/or drug abuse, violence or an inability to sleep.

iii) Physiological Manifestations

Extreme stress demands and subsequent behavioural changes can result in negative physical reactions which include heart attacks, ulcers and skin disorders. Continued exposure to the stress situations without a corresponding increase in coping resources can result in fatigue, exhaustion and burnout (Milstein et al., 1984:294; Dunham, 1984:85-99).

#### 2.2.4.2 Organizational consequences

From the interactional perspective of stress, the costs to



an organization as a result of individuals experiencing high levels of stress are significant. Quick and Quick classify these as direct and indirect costs. Direct costs refer to increased absenteeism, turnover and strikes, lowered performance levels and decreased quality of work. Indirect costs are due to low morale and motivation, job dissatisfaction, poor work relationships and breakdown in communication (1985:723-724).

#### 2.2.5 Conclusion

In summary, it can be stated that the extensive research on occupational stress reviewed here provides substantial evidence to support the notion that the work environment and modern organizations have an impact on the physical and mental health of their members.

The categorizational framework of Cooper and Marshall is particularly relevant in the present study since it not only recognizes individual differences in responding to and coping with stressors in the work environment, but also because it recognizes the important interrelationships between the characteristics of the individual, the characteristics of the organization and the characteristics of the wider social environment in stress and coping. This interactional framework is extremely useful in understanding the problems of teacher stress since teaching contains many elements in each of the categories discussed above which can

become potential stressors. This will become clearer when the literature on teacher stress is reviewed in the next section.

### 2.3 TEACHER STRESS

While teacher stress is of international concern, it is a relatively new area of empirical research, therefore the teacher stress phenomenon remains vague (Pettegrew and Wolf, 1982:373). Initially, stress studies were directed toward industrial organizations within the private sector. However, since the mid-1970's there has been increasing speculation among researchers that stress may be especially prevalent among human service professions, particularly the teaching profession, and that this may have far-reaching consequences for the entire public education system (Kyriacou and Sutcliffe, 1977, 1978; Pettegrew and Wolf, 1982b:374).

The several issues of concern pertaining to teacher stress are contained in the following quotation by Needle et al.:

*"Teaching today is one of a number of high-stress occupations. Psychological stress is a serious occupational hazard with adverse consequences for the teacher's health, well-being and career. It is also quite probable that job stress negatively and substantially affects the classroom environment, the teaching-learning process and attainment of educational goals and objectives."* (1980:96)

For convenience, the literature on teacher stress will be reviewed here under the following headings:

1. Definition and models of teacher stress
2. Prevalence of teacher stress
3. Sources
4. Symptoms and consequences of teacher stress
5. Coping behaviours
6. Demographic characteristics of teachers in stress and coping
7. Evaluation of research

#### 2.3.1 Definition and Models of Teacher Stress

Most interactional models of teacher stress are very similar and in many cases one can be substituted for another by changing the nomenclature (Kyriacou and Sutcliffe, 1978b:4). The definition and model used in this study is the one proposed by Kyriacou and Sutcliffe (1978b:2-5). Its essential features will therefore be discussed.

Using a model of stress similar to Lazarus's (1966), Kyriacou and Sutcliffe define teacher stress as : "*a response syndrome of negative affect (such as anger or depression) by a teacher usually accompanied by potentially pathogenic physiological and biochemical 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 self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat". (1978a:2).*

In their definition and model, Kyriacou and Sutcliffe conceptualize teacher stress as negative and potentially damaging to the teacher's health (See Fig. 2.3). The key element is the teacher's perception of threat to his self-esteem or well-being. A distinction is also made between potential occupational stressors (i.e. objective aspects of the teacher's job such as excessive workload or high noise level) and actual occupational stressors. Whether or not a potential stressor will develop into an actual stressor depends on the teacher's appraisal of the demands made upon him as well as his individual characteristics. These include his biographical details, personality traits, higher-order needs (such as the need for self-actualization), ability to cope with the demands and his beliefs-attitudes-values system. Stress will arise if the teacher perceives that he is unable to cope with the demands, that such failure has important consequences for his mental or physical well-being, or if such demands conflict with his higher-order needs. In addition, stressors may originate from outside the work context; these have been termed non-occupational stressors e.g. life crises or ill-health. Feedback processes which interrelate the various aspects are an important characteristic of this model.

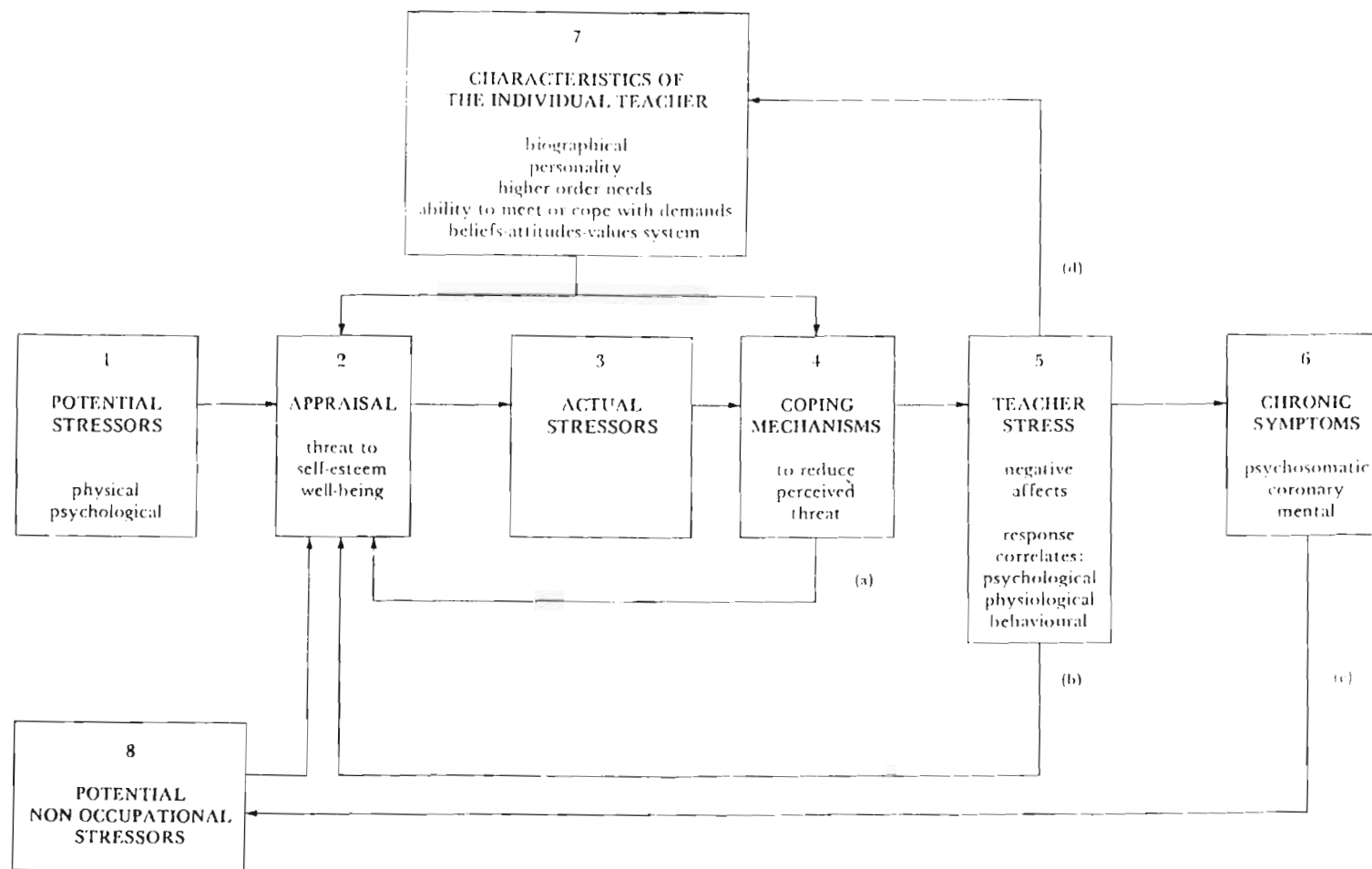


Fig. 2.3 : A MODEL OF TEACHER STRESS  
From Kyriacou, C. & Sutcliffe : Educational Studies  
(1978 : 3)

### 2.3.2 Prevalence of Teacher Stress

During the last fifteen years there has been a gradual, but steady increase of international interest and concern relating to the subject of stress in teaching. Evidence of this can be seen in the proliferation of studies on the subject conducted by researchers in various countries, for instance in the U.S.A. (Needle et al., 1981; Farber, 1984; Milstein et al., 1984; Dworkin et al., 1989); Australia (Laughlin, 1984; Otto (1986) Tunnecliffe et al., 1986); Canada (Hembling and Gilliland, 1981); Israel (Smilansky, 1984); Malta (Borg and Falzon, 1990); New Zealand (Dewe, 1986); Sweden (Tellenback et al., 1983); Britain (Kyriacou and Sutcliffe, 1977a; Dunham, 1984; Cox and Brockley, 1984; Trendall, 1989); and Zimbabwe (Wilson et al., 1990).

In Britain, the results of Kyriacou and Sutcliffe's single-item questionnaire surveys of teacher stress (1977, 1978b, 1979a, 1979b) in comprehensive schools indicate that between one-fifth and one-third of teachers experience a great deal of stress. In an earlier study Dunham (1976) found that the reorganization of secondary education was accompanied by an increase in teacher stress and that *"severe stress is being experienced by more teachers"*.

Studies in the U.S.A. suggest that teachers there experience higher levels of occupational stress than teachers in Britain. Coates and Thoresen (1976) state that nationwide

surveys conducted by the National Education Association in the 1930s, 1950s and 1960s have consistently indicated that a significant number of teachers experienced stress at a moderate or considerable level. Truch (1980) states that results of surveys done by various professional associations and researchers have revealed that up to 90% of U.S.A. teachers report experiencing job-related stress.

Studies worldwide also typically indicate that a large proportion of teachers report experiencing high levels of stress (Cunningham, 1983; Farber, 1984; Fletcher and Payne, 1982; Smilansky, 1984; Laughlin, 1984; Otto, 1986; Tunnecliffe et al, 1986). Tunnecliffe et al. (1986:1) report, for example, that 40% of teachers at all school levels in Western Australia felt that they were working under considerable stress. They claim that *"the problem of teacher occupational stress and the search for effective ways of stress management in schools remain chronic"*. (1986:124).

Similar surveys which have compared teachers with other professionals have typically found that teachers appear to perceive their jobs as more stressful than other comparable professionals (Pratt, 1978; Cox and Brockley, 1984).

The findings of two studies in Britain which focused on the prevalence of self-reported stress among principals (Downtown, 1987) and deputy principals (Knutton and Mycroft,

1986) also lend some support to the claim that, like teachers, a considerable proportion of principals and deputy principals find their job stressful.

To summarise, when one considers all the above studies together, one notes that a substantial number of teachers perceive their job to be stressful and that there is, indeed, a problem.

### 2.3.3 Sources of Teacher Stress

This aspect of teacher stress has been widely researched by means of rating or ranking scales (Houghton et al., 1988), interviews (Dewe, 1986) and case studies (Freeman, 1986).

When reviewing the major stressors identified in the studies undertaken to date, the following precautions have to be noted:

1. It is simplistic and naïve to attempt to list the main sources of stress indicated by the studies in some sort of order since each study must be viewed in its own context (Kyriacou, 1987:148).
2. Since the major sources of stress change over time, the findings of the reviewed studies may not necessarily reflect the current state of affairs.
3. Each teacher has his/her own unique stress profile. It is, therefore, risky to discuss sources of stress in general terms (Kyriacou, 1989:32).



The vast majority of the earliest studies on occupational stress among teachers were carried out in U.S. educational settings and were mainly concerned with the incidence of anxiety among teachers. In their review of studies undertaken on sources of teacher stress, Coates and Thoresen (1976:159-184) found differences in concerns and sources of anxiety for beginning and experienced teachers. Beginning teachers' anxieties focused on : ability to maintain classroom discipline; gaining approval from students; their knowledge of subject matter; what to do if they make mistakes or run out of materials; and how to relate personally to other staff members, the school system, or parents.

In contrast to these concerns which are largely anticipatory and self-focused, concerns of experienced teachers were related to actual task demands and job characteristics. These included : time demands; difficulties with pupils; large class enrolment; financial constraints; and lack of educational resources.

In his study of suburban teachers in New York, Farber (1984:327) found that the prime sources of stress were due to excessive paperwork, unsuccessful administrative meetings, and lack of advancement opportunities. In their study of 245 elementary school teachers in Texas, DeFrank and Stroup (1989:99-109) identified the issues, in rank

order, to be : evaluation/appraisals (55%); time constraints; day-to-day teaching concerns ( $\pm 33\%$ ); and extracurricular responsibilities ( $\pm 33\%$ ).

In a comprehensive review of 49 studies undertaken on sources of teacher stress, Turk, Meeks and Turk (1982:3-25) ranked the 7 problem areas as follows : poor school environment (cited in 49% of the 49 studies reviewed); pupil misbehaviour; poor working conditions; personal concerns of teachers; relationships with parents; time pressures due to excessive workloads; and inadequacy of training.

Blase (1982, 1986) adopted a qualitative approach to studying stress among American teachers. He grouped work-related demands into first- and second-order stressors. First-order stressors interfere directly with the teacher's effort (time and energy) to achieve valued outcomes with students. In his 1982 study these included student apathy, student discipline, poor school attendance, paperwork, preparation work, irresponsible teachers, obtrusive supervisors and non-supportive parents. Second-order stressors have a less direct effect and include factors like low salary and status of the profession.

In his second study, Blase (1986 :13-40) found the four major categories of perceived stressors to be : organizational (39%); student-related (17,8%); administrative (16,9%); teacher-related (9,4%). Together these factors constituted 83,1% of the responses (1986:33).

Blase states further that most phenomena experienced as stressful by teachers are those that deprive them of time, interfere with instruction, and are considered too demanding, quantitatively and qualitatively (1986:27). Interestingly, Blase found that salary, a factor frequently reported in other survey studies (Lortie, 1975; Milstein and Golaszewski, 1983) seldom appeared in his study findings (1986:26-27).

Numerous studies have also been conducted among teachers in British comprehensive schools. Lortie (1975) used the interview method in his study of 94 teachers. He found that the main areas of complaint reported by the teachers were : clerical duties; interruptions and time pressures; and troublesome students. However, an interesting finding was that whereas "better facilities" were regarded as the change that would most increase teacher effectiveness, "more money and promotion" was seen as the change that would most increase job satisfaction.

Cox (1977) identified five factors connected with job dissatisfaction : training and career development; nature of work; work environment; school organization; and relations between the school and community.

Dunham (1977) identified six categories of stress situations: educational and social change; role conflict and confusion; poor physical and working conditions; problem pupils; poor inter-professional communication and co-operation; and problem teachers.

Dunham (1984:5-13) points out that government policies and the reorganization of the British education system have caused severe adjustment problems for some teachers. These are :

1. leaving the security of a familiar environment in the previous school;
2. working in larger and more complex schools;
3. teaching pupils with a much wider range of abilities, attitudes and behaviour;
4. adapting to major organizational and curricular changes.

These findings are particularly relevant to South Africa during the present time when all aspects of South African society are in the process of being restructured - educational, political, economic and social.

In the first study which focused exclusively on the sources of stress in the comprehensive school context, Kyriacou and Sutcliffe (1978b:159-167) identified the ten stressors with the highest mean values, in descending order, to be: pupils' poor attitude to work; trying to uphold/maintain values and standards; poorly motivated pupils; covering lessons for absent teachers; too much work to do; lack of time to spend with individual pupils; individual pupils who continually misbehave; pupils who show a lack of interest; not enough time to do the work; and lack of time for marking.

The researchers grouped these stressors into four categories: pupil misbehaviour; poor working conditions; time pressures; and poor school ethos.

More recently British researchers have investigated the causes of stress for comprehensive school teachers by adopting a case study approach (Coldicott, 1985; Wilkinson, 1988; Freeman, 1986; Trendall, 1989). In Freeman's study (1986:10-12), the four factors which accounted for 81,4% of the total variance were: loss of purpose and poor organization and management; difficulty teaching children in certain subject areas; discipline; and relationships between staff and management.

Wilkinson's study showed that the ten major sources of stress, in rank order, were the following :

1. seasonal pressure periods and conflicting demands (81,53%);
2. individual workload affecting quality of work (56,92%);
3. difficulty achieving desired standards in lessons (53,84%);
4. role conflict : pastoral versus academic (52,3%);
5. incidents involving a particular pupil or class (50,76%);
6. lack of facilities affecting quality of teaching (46,15%);
7. concern over pupil behaviour (44,6%);
8. daily workload too great (44,6%);
9. class sizes too large for facilities (41,53%); and
10. unsatisfactory communications (36,92%),

Wilkinson summarised the causes of stress raised by the interviews into four categories : working conditions; role conflict and role ambiguity; pupil problems; and time pressures.

Trendall (1989:52-58) found that teachers from the primary, secondary and special schools in her sample reported less stress from role conflict (in spite of their instructional, pastoral and administrative roles) than from role overload, especially as a result of recent changes in British educational policies. Moreover, her study indicated that the four most apparent stressors were : lack of time; large classes; teaching workload; and pupil misbehaviour.

A close scrutiny of the stressors identified above in studies of British schools shows that the majority of these stressors are related to the teachers' control of time. This gives support to Blase's major finding in respect of work stressors in the American school system, viz. that those factors which are perceived as very stressful by teachers are those which significantly interfere with the teachers' instructional time thereby adversely affecting his/her performance and the achievement of job-related goals (1986:28-29).

Another interesting observation is that the major causes of teacher stress in British and American educational settings seem to be brought about by the teacher's desire to achieve good level of work with the pupils rather than by factors attributed to the organization of the school (Coldicott, 1985 in Borg, 1990:111; Milstein et al., 1984:293).

In a New Zealand study, Galloway et al. (1985 : 44-51) found that the ten major sources of dissatisfaction reported by their sample of 296 primary school teachers are, in rank order, as follows :

1. the methods used to grade teachers for promotion (74,7%)
2. the attitudes of society towards education (74,3%)
3. the opportunities for useful in-service education (73%)
4. the preparation time available during the school day (72,3%)
5. the factors used to determine salaries (67,2%)

6. the status of teachers in society (59,1%)
7. the amount of preparation and correction time required of teachers during and out of school time (59,1%)
8. the availability of ancillary staff to assist teachers (58,8%)
9. the number of hours of non-teaching duties each week (48,6%)
10. the availability of facilities for teachers' recreation activities (46,9%).

Studies on sources of teacher stress have also been carried out in the Australian educational setting (Laughlin, 1984; Otto, 1986). Otto (1986:104-131) lists the major sources of stress among 609 teachers in sixteen Melbourne schools (state high, technical and primary) as follows :

- time and workload pressures;
- problems related to student behaviour and student needs;
- problems with school administration and staff tensions;
- relations to the Education Department over whose decisions teachers felt they had no control; and
- negative community attitudes to teachers.

Specialist studies have focused, for example, on those in managerial positions, such as heads of departments (Dunham 1978, 1984), deputy heads (Dunham, 1984) and principals (Dunham, 1984; Freeman, 1986; Tung and Koch, 1980) and have highlighted the stress arising from their managerial role : role conflict, motivating colleagues, fear of being



unpopular, the exercise of responsibility, and difficulties over administrative work. At the same time, these findings also suggest that heads of departments, deputies and principals also have certain sources of stress in common with teachers.

Studies of student teachers (Hart, 1987:12-17; Gorrell et al., 1985) and beginning teachers (Evans and Tribble, 1986; Fimian and Blanton, 1987; Keavney and Sinclair, 1978) highlight concerns over the adequacy of their classroom teaching (both in terms of academic content and maintaining discipline) and the process of being evaluated by their supervisor. The developmental trend which was started by Fuller (1969) and which in recent years has been supported by other researchers (Adams, 1982; Huberman, 1989; Laughlin, 1984; Reeves and Kazelkis, 1985), has had as its focus of interest the identification of the changing concerns which cause stress among teachers during different phases of their teaching career.

#### 2.3.3.1 EVALUATION OF STUDIES

The findings of the studies reviewed above suggest that there is no single predominant source of teacher stress. Rather, the sources of stress are many and varied, and they seem to change not only from one context to another, but over time within the same context as well.

While it is acknowledged that the main sources of stress for any individual teacher or, generally, for staff in any particular school, vary greatly, a closer examination of the studies reviewed reveals that a number of stressors seem to recur in different groups of teachers, in different types of schools, and in different educational settings. From the interactional standpoint, this suggests that teacher stress cannot be explained merely as a product of the characteristics and subjective perceptions of the teacher, but as a product of the characteristics of the work environment as well.

Pettegrew and Wolf point out that in previous empirical research on teacher stress, there has been "no integration of role-related and task based stress into an investigation of a teacher population" (1982:377). An attempt to address this problem is made in the present study. Task-based, organizational and role-related stressors will be incorporated in the investigation of stress among Indian teachers in secondary schools.

#### 2.3.4 Symptoms and Consequences of Teacher Stress

As stated previously, the symptoms or manifestations of stress may be physiological, psychological or behavioural, or a combination of these three categories. Cooper and Marshall (1976) point out that the long-term effects of occupational stress may include both physical and mental ill-health.

#### 2.3.4.1 Physiological symptoms

According to Needle et al. (1981:175-181) teachers frequently report feeling completely worn out at the end of the day, experiencing difficulty in getting up in the morning, feeling nervous and tense, and having headaches.

Belcastro's list (1982:1045-1046) of somatic complaints include abdominal pains, difficulty in breathing, eczema, occupational injuries, bowel difficulties and tearfulness.

These two researchers also mention several physiological illnesses and chronic conditions which are related to teacher stress. These include : high blood pressure, kidney or bladder trouble, arthritis, lung or breathing problems, gall bladder disorders, cardio-vascular disorders, insomnia, gastritis, stomach ulcers, anaemia, asthma and colitis (Belcastro, 1982:1045-1046), Needle et al. 1981: 175-181).

Forman and Cecil point out that most of the data given have been obtained from self-reports. This makes comparisons between teachers' reports and the reports of employees from other professions difficult. For this, one needs more objective measures of physiological reactions such as heart rate, blood pressure, or type of medical treatment received. Consequently, there is little evidence to indicate that teachers display a higher incidence of stress-related physical illnesses than other population groups (1986:211-212).

#### 2.3.4.2 Psychological symptoms

Among the most frequently reported psychological symptoms of teacher stress are "tension headaches" and "general irritability and bad temper" (Dunham 1977, 1980). Other symptoms include exhaustion, a lack of self-confidence, hypersensitivity to criticism, inability to relax, moodiness, forgetfulness, insomnia, excessive smoking, difficulty in concentrating and making decisions, frustration, anxiety, insecurity resulting from uncertainty in role definition, and psychosomatic symptoms (Dunham 1978:44-47,1980).

On the basis of studies carried out in three English comprehensive schools, Dunham (1984) concluded that the most frequent and intense manifestations were, in descending order : feelings of exhaustion; marked reduction of contacts with people outside school; frustration because there is little sense of achievement; and irritability.

In their survey involving 257 British teachers, Kyriacou and Sutcliffe (1978b:159-167) found that the seven items (out of a total of seventeen symptoms) with the highest mean frequencies on a five-point scale in descending order, were:

exhausted (M=2,047); frustrated (M = 1,841); under stress; very angry; very tense; anxious; and depressed. All seventeen symptoms of stress correlated positively with self-reported stress among teachers (1978b:165). Moreover, further analyses of the symptoms revealed that females

reported significantly more frequent symptoms for three items : "headaches" ( $p < ,001$ ); "tearful" ( $p < ,001$ ) and "exhausted" ( $p < 0,05$ ) (1978b:166).

In another study Kyriacou and Pratt (1985:61-64) found that the most frequently mentioned symptoms were : being unable to relax or "switch off" after work; feeling very tense; being emotionally and physically drained by the end of the day; and sleeplessness.

In the U.S.A. studies have been carried out by researchers such as Bloch (1978), Cunningham (1983), Milstein et al. (1984), and Blase (1986). Bloch (1978), for example, documented a form of "combat neurosis" among teachers in Los Angeles. Cunningham (1983, cited in Forman and Cecil, 1986:212) indicates that teachers under stress may have negative and cynical attitudes towards pupils, parents, and other school staff. Milstein et al. (1984:296) found in their study of 130 elementary school teachers that the three most common manifestations, in rank order, were : feeling anxious; physical exhaustion; and feeling depressed.

In his qualitative study, Blase (1986:13-40) rank-ordered the data into the following five categories of strong negative feeling states : anger states (with most frequent mention of terms such as "angry" and "frustrated"); depressive states; anxiety states; self-blame states; and physical feeling states (with "fatigue" and "tiredness" being used most often).

In an Australian survey Otto (1986:133-136) cites the following as the most frequently experienced symptoms among the 609 teachers surveyed : feeling "run down" and low in energy; tiring easily; feeling tense and nervous; feeling irritable; feeling depressed: having headaches; and having difficulty sleeping. Furthermore, more women than men seem to report more symptoms.

A close examination of the foregoing indicates that the symptoms of stress are varied. Reactions such as exhaustion, frustration, anxiety, depression, irritability, bad temper, and tension headaches are reported particularly frequently.

#### 2.3.4.3. Behavioural symptoms

Several studies that have examined the behaviour of high-anxiety teachers seem to suggest that teacher anxiety may have detrimental effects on teacher and pupil performance in the form of less positive teacher-pupil rapport (Petrusich, 1967, cited in Forman, 1982); low teacher warmth in relating to students (Kracht and Casey, 1968); increased pupil anxiety (Doyal and Forsyth, 1973), low pupil achievement (Washbourne and Heil, 1960); the use of less effective teaching and discipline techniques (Guzicki, Coates and Goodwin, 1980:17); and dogmatic and authoritarian behaviour (Krasno, 1972, in Forman and Cecil, 1986:212).

Other behavioural consequences of teacher stress frequently mentioned in the literature include absenteeism, tardiness, and high turnover (Kyriacou, 1980:124-125; Phillips and Lee, 1980:102-103). Dunham (1977:183) believes that absenteeism, truancy, leaving teaching and early retirement are forms of withdrawal associated with situations which become too stressful to tolerate.

#### 2.3.4.4 The effect of stress on teachers' mental well-being

A number of researchers have sought to investigate whether mental ill-health was related to perceived stress reported by teachers.

In the three studies reviewed in this section (Pratt, 1978; Trendall, 1989; Tuettteman and Punch, 1990), Goldberg's General Health Questionnaire (GHQ) was used as an index of mental ill-health. The GHQ is a measure of minor psychiatric illness like the less severe depressions and anxiety states. Increase in GHQ scores above a threshold of about six points indicates a growing need for medical and psychiatric treatment (Goldberg, 1972 in Borg, 1990:118).

In his study of 124 primary school teachers, Pratt (1978:3-13) reported a significant positive association between perceived stress and the GHQ-36 ( $r = 0,41$ ,  $p < 0,001$ ). He reported further that an inspection of the teachers' scores indicated that about 20% of the sample appeared to be "at risk".

Trendall's study (1989:52-58) does not offer any clear-cut conclusions but indicate that a significant proportion of the respondents appeared to be "at risk" of psychological ill-health.

In their survey of 789 secondary teachers from Western-Australia using the GHQ-30, Tuettemann and Punch (1990:25-29) found that, overall, 45% of the teachers were "at least moderately stressed" with 21,4% falling in the high range. Of these 23% males and 20% females scored in the high stress category. At the other end of the scale, 59% of female teachers scored in the "no stress" category compared with only 53% males. In both instances, the differences between the sexes were not statistically significant.

To summarise, the findings of the above studies show that self-reported teacher stress is related to mental ill-health.

The present study, inter alia, explores the association between self-reported teacher stress and psychological health among Indian secondary school teachers.

#### 2.3.4.5 The response correlates of teacher stress

The three most widely attributed behavioural consequences of teacher stress are lower job satisfaction, absenteeism and



intention to leave the profession (Kyriacou and Sutcliffe, 1978:89-96).

#### 2.3.4.5.1 Job satisfaction/dissatisfaction and perceived stress

Defining and measuring job satisfaction has been an issue of considerable debate in the teacher stress literature. Chapman and Lowther (1982:243) review three approaches :

1. Satisfaction is measured as the discrepancy between people's expectation of reward and their actual accomplishment.
2. Factors contributing to job satisfaction can be identified as satisfiers or dissatisfiers, but are not assumed to be on a conceptual continuum.
3. Satisfaction can be measured as a respondent's self-ratings on Likert-type scales in response to items asking about a person's overall experiences, e.g. the widely used single-item measure of Kyriacou and Sutcliffe.

In the present study, the second approach to job satisfaction outlined above, was used. It was based on Herzberg et al.'s (1959) two-factor theory, and on Galloway et al.'s (1985) survey of stress among 292 primary school teachers in New Zealand.

According to Herzberg et al. (1959, Herzberg, 1966), satisfaction and dissatisfaction are not opposite points on the same continuum, but are separate and distinct, forming two separate continua. Thus, it is possible to be both satisfied and dissatisfied at the same time. Satisfaction at work arises from intrinsic aspects of the job which meet the individual's need for psychological growth and achievement, e.g. teachers seeing their pupils make progress. In contrast, dissatisfaction arises from conditions at work e.g. inadequate salary, or excessive supervision. Furthermore, good conditions of employment will not on their own produce satisfied workers; however, they will reduce dissatisfaction. Conversely, satisfaction from intrinsic aspects of the job will not on its own reduce dissatisfaction at conditions of employment.

Holdaway (1978:30-47) found that the concept of "facet satisfaction" correlated highly with single-item measures of overall job satisfaction. Lawler (1973, in Galloway et al., 1985:44) defines facet satisfaction as "people's affective reactions to particular aspects of their job".

Job satisfaction in teaching is very important as it has an inverse relationship with stress, i.e. the more a teacher is satisfied in his/her job, the less likely he/she is to experience stress. Moreover, the satisfied teacher probably feels more professional esteem, and therefore, probably performs better.

There is a great deal of research that points to a number of variables that predict teachers' job satisfaction, turnover, and general distress. Among these are the role teachers perceive for themselves, the school climate, teachers' coping resources, and various job-specific problems (Litt and Turk, 1985:179).

A review of the literature shows that there is some discrepancy in the research findings regarding the degree of satisfaction/dissatisfaction that teachers express regarding their work. In their study, Kyriacou and Sutcliffe (1979a:189) found that perceived stress was negatively associated with job satisfaction ( $r = -.27$ ;  $p < .01$ ). Furthermore, the sources of stress that correlated most with job satisfaction were "poor career structure" for teachers aged 30-44 years, and "inadequate salary" ( $r = .36$ ;  $p < .01$ ) for heads of departments, both items relating to conditions of work rather than the actual task of teaching.

Researchers in Britain (Dunham, 1977:186-187) and the U.S.A. (Schwab and Iwanicki, 1982:70-71; Litt and Turk, 1985:178-185; Tosi and Tosi, 1970:1072) have reported role conflict to be a major source of stress and dissatisfaction among teachers. In their study, Litt and Turk (1985:184) also found significant negative correlations between job satisfaction and negative well-being ( $r = -.33$ ), intention to leave teaching ( $r = -.39$ ) and absenteeism ( $r = -.31$ ).

Tosi and Tosi (1970:1071), on the other hand, found that job satisfaction was not significantly related to role ambiguity.

Needle et al. (1980:98) also found that teachers reporting higher levels of job stress report greater job dissatisfaction, lower occupational self-esteem, more somatic complaints and lower general well-being than those reporting lower levels of job stress.

Farber (1984:325-331); Trendall (1989:56); Freeman (1986:10-12), and Galloway et al. (1985:44-45) found that teachers derived satisfaction more in the interpersonal realm, especially with pupils and selected colleagues.

#### 2.3.4.5.2 Absenteeism

Simpson (1976, in Kyriacou, 1980:124) believes that absence behaviour allows teachers to withdraw temporarily from stress at work without having to make a distinct break. Such occasional withdrawals enable teachers to readjust continually to stressful work situations while continuing to develop the necessary skills to deal with the sources of stress. In his study of 738 males and 1648 female teachers during one academic year, Simpson found that in both sex subgroups the highest inception rate for sickness was at the beginning of their teaching career.

Kyriacou and Sutcliffe (1979a) reported significant associations between self-reported teacher stress and total days absent ( $r = 0.12$ ;  $p < 0.05$ ) as well as teachers' decisions to leave teaching ( $r = 0.18$ ,  $p < 0.01$ ) for their sample of 218 British secondary school teachers. Litt and Turk (1985:178-185) found in their study of secondary teachers in Connecticut that teachers' reports of absences correlated significantly with negative well-being ( $r = .40$ ) and job satisfaction ( $r = -.31$ ). However, both Kyriacou and Sutcliffe as well as Litt and Turk state that a full understanding of the relationship between teacher stress and absenteeism will require an identification of the actual reasons for the number of absences.

#### 2.3.4.5.3 Intention to leave teaching

According to Fimian and Blanton (1987:157-165), a significant proportion of beginning teachers leave teaching during the first few years because of stress. In their study of trainee and beginning teachers they found strong correlations between stress, burnout, role conflict and ambiguity.

Kyriacou and Sutcliffe (1979a:90) report studies by Charters (1970), Pratt (1977) and Taylor and Dale (1971) which indicate that intention to leave teaching appears to be greater for female, graduate, and relatively younger and less experienced teachers.

Litt and Turk (1985:184) found that intention to leave teaching was significantly correlated with job satisfaction ( $r = -.39$ ). The reasons given by teachers in their sample were "salary" (76%), "poor opportunities for advancement" (45%), and "too much work to do or too little time to accomplish it" (34%). These researchers state further that role overload and less effective coping resources are important contributors to intention to leave teaching. Kyriacou (1987:148), however, is of the opinion that actual resignations or early retirements are influenced by many other factors for a consistent relationship to be identified between teacher stress and a desire to leave teaching.

In a study on teacher attrition, Chapman and Hutcheson (1982:93-105) found that there were significant differences between people remaining in teaching and those who started teaching and subsequently changed careers, in respect of the importance they assigned to selected criteria for success. Those who left teaching indicated the following to be important : salary, job autonomy, and the chance to contribute to decisions. Individuals remaining in teaching were more oriented toward interpersonal rewards : the approval and recognition of supervisors, family and friends (1982:104).

#### 2.3.5 Coping

Since 1980 a number of researchers have investigated the actions teachers take in order to cope with occupational

stress and how frequently they use these coping actions. Whether a teacher will employ direct action or palliative devices depends largely on the characteristics of the situation and the teacher's personality. In a study involving 42 comprehensive school teachers in England, Kyriacou (1980b:57-61) found that the most frequently used coping actions reported were "try to keep things in perspective", "try to avoid confrontations" and "try to relax after work". A principal component analysis revealed three factors accounting for 36,7% of the total variance. These factors were labelled : "express feelings and seek support", "take considered action", and "think of other things". Kyriacou points out that the most frequently used coping strategies adopted by teachers involve social support, seeking advice and the expression of feelings (1980:60). Dunham (1980:11-20; 1984:109) made similar findings.

Kyriacou and Pratt (1985:163) reported that the most frequent responses in their investigation were : "trying to stay calm"; "sharing problems with others"; keeping things in perspective"; "avoiding confrontations"; "praying"; "being well prepared"; and "relaxing after work".

In a survey of 800 primary school teachers throughout New Zealand, Dewe (1985:27-40) found that the seven most frequently used coping strategies were : "always try to be consistent and honest when dealing with children"; "establish some sort of teaching routine"; "keep the

children occupied"; "positively reinforce the children"; "be well organized and planned"; "use the holidays to recuperate", and "have a sense of humour".

In a U.S. study involving 291 high school teachers, Litt and Turk (1985:178-185) found that the strategies reported as being most effective tended to be actions geared towards resolving a problem, i.e. "seeking more information about the problem" and "taking firm action based on current understanding". "Talking to others to relieve distress" was rated as being moderately effective in resolving problems.

In her British study Freeman (1987:1-16) found that the three most popular strategies were : "try to keep things in perspective" (92%); "think objectively about the situation and try to keep emotions under control" (89%); "try to take some immediate action on the basis of your present understanding of the problem" (81%).

In overall terms studies of teacher coping strategies show that demographic variables like teacher sex, length of teaching experience, age group taught and ability stream taught were not treated by researchers as potentially significant moderators. However, in a recent study in Malta, Borg and Falzon (1990:50-57) reported that these variables proved to be significant moderators of some of the coping actions. Using a list of ten coping actions derived from Kyriacou's (1980) study, these authors found that the



three most popular coping actions were : "try to relax after work"; "try to avoid confrontations", and "try to nip potential sources of stress in the bud".

Borg and Falzon also reported that the teacher sex subgroups differed significantly on the majority of the coping actions. Moreover, male teachers tend to adopt palliative techniques such as "try to relax after work"; "try to reduce tension by after-work activity"; "try to forget work when day is finished"; "try not to think or worry about it". Female teachers, however, prefer direct-action strategies such as "try to get advice and suggestions from someone at work"; "talk about problems with someone else after work"; "try to change your approach".

Results for the four teaching experience subgroups showed that all teachers tend to use the same top two strategies, viz. "try to relax after work" and "try to avoid confrontations". Moreover, none of the subgroups manifested preference for either palliative or direct-action strategies.

Trendall (1989:56) found that younger teachers placed more emphasis on physical exercise but also found it more difficult to forget the day's events outside school hours. Another finding was that both Scale 1 and senior teachers were able to "let off steam and express their irritation".

Moreover, the high and low stress groups favoured similar strategies, although the less stressed group tended to feel less need to avoid confrontation.

The above overview indicates that the most frequently used coping strategies include both palliative and direct action strategies and that some of the most widely reported strategies involve seeking advice and social support.

#### 2.3.6 Demographic characteristics of teachers in stress and coping

Recently researchers have shown an increasing interest in the role that personal factors play in the relationships between perceived stress, coping and health. Factors such as personality, self-concept, ideology, locus of control, and demographic factors such as age, sex, teaching experience, qualification, grade taught, have received increasing attention in investigations of stress and teacher stress (Cohen, 1979:77-111; Halpin, Halpin and Harris, 1982:195-199; Harris, Halpin and Halpin, 1985; Kyriacou and Sutcliffe, 1977, 1978b, 1979a; Laughlin, 1984; Otto, 1986; Trendall, 1989:52-58).

A review of the research literature indicates that there appears to be a great deal of inconsistency in research findings pertaining to the relationship between self-reported teacher stress and demographic characteristics. DeFrank and Stroup (1989:105) and Kyriacou

and Sutcliffe (1977:7; 1978b:159), for example, reported a minimal association between perceived stress and the demographic characteristics of sex, age, qualifications, marital status, teaching experience and rank. However, in another study, Kyriacou and Sutcliffe (1979a:89-96) found the following significant interactions: that male heads of departments and female teachers reported greater stress than their colleagues; that intention to leave teaching is greater for female, younger and less experienced teachers; that female university graduates and female heads of departments were more likely to leave teaching.

In their study, Harris, Halpin and Halpin (1983:348) found that older teachers reported more stress in respect of professional inadequacy and job overload. Farber (1984:329) reported that teachers in the 21 - 44 year age groups perceived themselves as more burned out and less committed to teaching than did teachers in the 45-65 year age category.

Laughlin (1984) found that biographical mediators have an important influence on stress factor perceptions. He found that female teachers reported greater overall stress, and were more affected by pupil misbehaviour than male teachers. Moreover, young, inexperienced teachers were most affected by pupil misbehaviour but least affected by resource difficulties, the latter being reported by all the other groups. Professional recognition needs were felt most

intensely by teachers in their mid-career years while older teachers felt that time shortages caused considerable professional difficulties.

Trendall (1989:55) reported that high levels of perceived stress were experienced by more females, by more teachers with basic qualifications, and by those having 5-10 years teaching experience. On the other hand, senior teachers reported fewer stresses. Moreover, data from the GHQ-scale seemed to suggest that more teachers (and more males in the 30-39 year age group) appeared to suffer poor health.

In their recent study of 574 West Australian secondary teachers, Punch and Tuettemann (1990:349-381) investigated the relationship between psychological distress using the GHQ-30 and the eight school-related factors : perceived lack of efficacy/achievement, inadequate access to facilities, lack of collegial support; excessive societal expectations; intrusion of schoolwork into out-of-school hours, lack of influence/autonomy; student misbehaviour, and lack of praise/recognition. The researchers found differences between male and female teachers in both the pattern and strength of the relationships, indicating that teachers' responses to their work environment are sex-related. They suggest that work-related issues are more influential in both producing and alleviating distress among female teachers than they are for males (1990:379).

Similarly, other researchers such as Milstein et al. (1984:293- 297) found that females were more stressed than males about poor student effort, while Houghton et al. (1988:309) reported that more women (61%) than men (50%) admitted to having behaviour problems in their classes.

With regard to coping strategies, Trendall (1989:56) found that younger teachers placed more emphasis on physical exercise to reduce stress, but that they also found it more difficult to forget the day's event outside school hours. In another recent study, Borg and Falzon (1990:50-58) found significant sex differences in the type of coping actions used, with female teachers showing a preference for direct-action strategies while male teachers resorted more often to palliative measures.

In the present investigation, one of the aims of the researcher was to investigate the possible relationships between the various components of occupational stress among Indian secondary teachers in the Greater Durban area (e.g. prevalence of stress, sources, symptoms, coping actions, intention to leave teaching and satisfaction/dissatisfaction with teaching) and demographic variables such as sex, marital status, age, length of teaching experience, qualification and rank.

#### 2.3.7 Evaluation of the research literature

This comprehensive review has focused on some of the studies

pertaining to the major aspects of stress in teaching. It is difficult to compare the findings of different studies mainly because of the differences in research methodologies employed. Almost all the studies use subjective self-report techniques, mainly structured self-administered questionnaires and interviews. These techniques have a number of inherent limitations. For example, responses can be distorted through faking, bias, or forgetting. However, despite the limitations, the studies reviewed have proved to be very useful in giving us a clearer understanding of teacher stress.

A large number of the studies that have been reviewed report data from teachers in general without considering that stress may be related to various demographic variables of the teachers. However, there has been a trend in more recent studies to investigate subgroup differences as well.

Furthermore, a number of the studies reviewed are now quite dated. Consequently, the findings of some of these studies may not necessarily reflect the current state of affairs. As Kyriacou (1989a:32) points out, "the many changes that are taking place in schools are such that our understanding of the current major sources of stress needs to be based on up-to-date information". The present study is a contribution towards this end.

## CHAPTER THREE

### THE PRESENT INVESTIGATION

#### 3.1 THE NATURE OF THE PRESENT RESEARCH

Gay (1987 : 18-19) classifies methods of research into the following categories :

- (a) Historical
- (b) Descriptive
- (c) Correlational
- (d) Causal - comparative, and
- (e) Experimental

Descriptive studies may be further classified in terms of how data are collected, i.e. through self-report or observations. Self-report research requires the collection of standardized, quantifiable information from all members of a sample and comprises the following types of studies :

- (a) Survey research
- (b) Developmental studies
- (c) Follow-up studies
- (d) Sociometric studies (Gay, 1987 : 221-222)

The present study falls into the descriptive-survey category. This involves collecting data from a sample and then testing hypotheses or answering questions related to the subject under study - for example, stress among teachers.

### 3.2 METHODS OF DATA COLLECTION IN DESCRIPTIVE RESEARCH

Descriptive data are usually collected by means of questionnaires, interviews or observations. In this study a survey questionnaire was used to obtain overall demographic and other quantitative data. This was followed by a smaller scale but more intensive series of interviews to gather in-depth qualitative data to supplement the quantitative information.

The steps in conducting a questionnaire study are essentially the same as for other types of research, and are as follows :-

- (a) Statement of the problem
- (b) Selection of the subjects
- (c) Construction and validation of the questionnaire
- (d) Pretesting the questionnaire
- (e) Collecting, processing and analyzing the data
- (f) Drawing conclusions and making interpretations.

Survey questionnaires are usually mailed. This method has a number of advantages. Compared to the interview procedure, a questionnaire requires less time, is less expensive, is



simpler to process and analyze, and permits collection of data from a much larger sample. Interviews are preferred to mail questionnaires when a researcher needs to establish rapport with respondents, explain the purposes of the study in more detail, and clarify problems associated with individual items.

An important disadvantage of the mail questionnaire approach is the possibility of a poor response rate. This can affect the reliability of the findings. To obviate this problem in the present study, the researcher met with the staffs of the schools in order to explain the nature and purpose of the research, hand out the questionnaires and enlist their co-operation.

### 3.3 SAMPLE AND SAMPLING PROCEDURE

Ideally, any study of stress among school teachers should involve members from all population groups. This was not done in this study because teachers of different population groups serve in different education departments and therefore, presumably, work in dissimilar organizations and experience stresses emanating from different kinds of job situations. To control for this factor, the sample in this study was limited to Indian secondary school teachers.

Two further points had to be considered when choosing the sample. These were :

- a) The sample had to be representative of all teachers in Indian secondary schools in the Greater Durban area. Only then could it become possible to generalise to a wider population.
- b) The sample had to be large enough to provide reliable results. There is less sampling error associated with larger samples (Black and Champion, 1976:316).

### 3.3.1 Selection of the Schools

The present study was located in the Greater Durban area which extends from Chatsworth in the south to Avoca in the north and inland as far as Reservoir Hills (See Fig. 3.1)

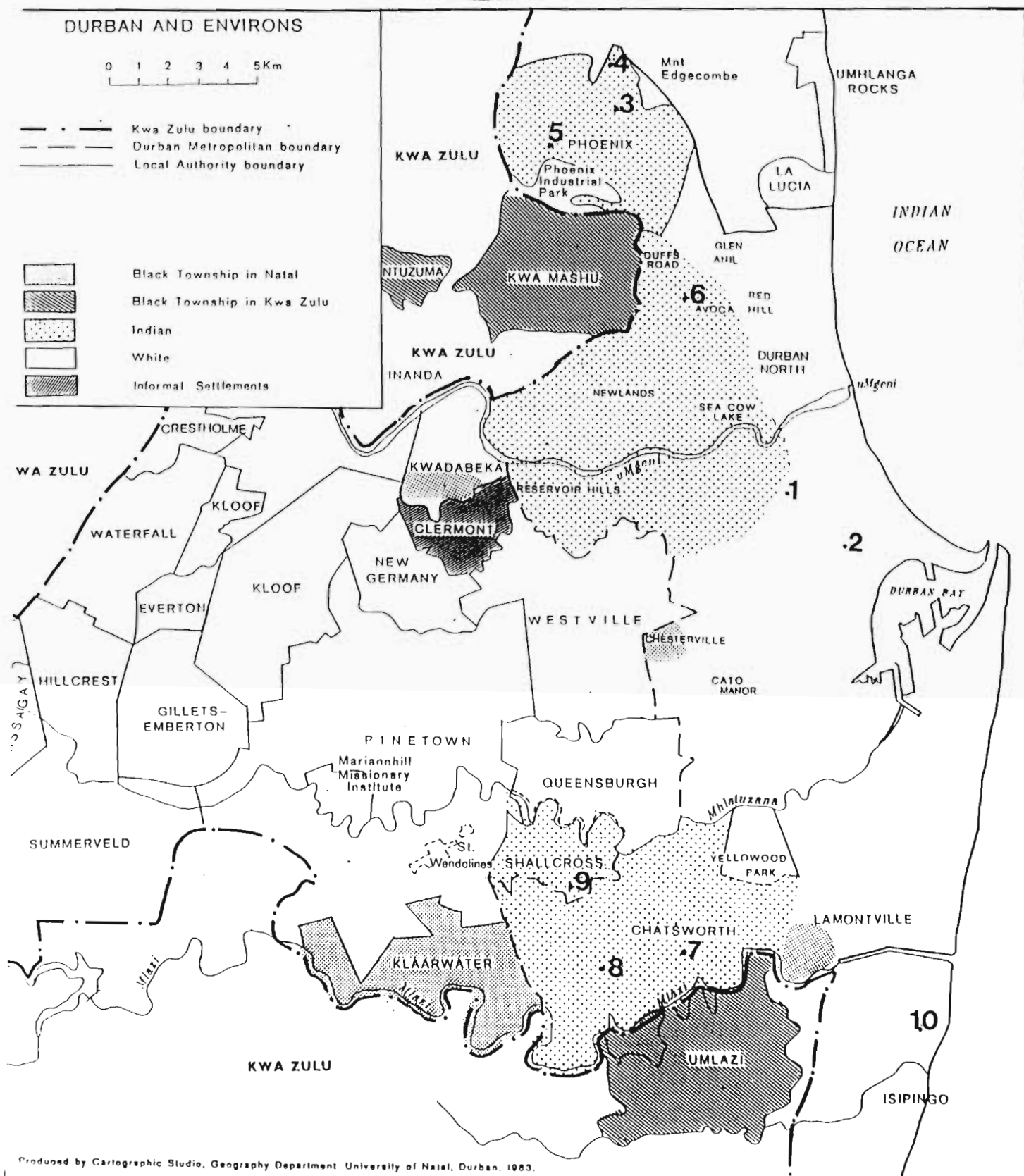
A study of the "Address List of Institutions" (5 May 1990) published by the Department of Education and Culture (House of Delegates) showed that fifty-four secondary schools are situated in this area. For convenience these schools were assigned to one of five broad areas according to their location. The number of schools which each area contributed to the study was determined on a *pro rata* basis. Which particular schools were chosen was determined by a random selection procedure. This information is summarized in Table 3.1.

TABLE 3.1

DISTRIBUTION OF SCHOOLS IN SAMPLE BY AREA

AREA	TOTAL NO. OF SCHOOLS	NO. OF SCHOOLS SELECTED
Chatsworth/Shallcross	20	3
Phoenix	19	3
Durban Central	7	2
Merebank	3	1
Sea Cow Lake/Effingham	5	1
TOTAL	54	10

The ten schools participating in this research represent, socioeconomically, a cross-section of the Indian population.



**Fig. 3.1 : LOCATION OF THE TEN SCHOOLS WITHIN THE GREATER DURBAN AREA**

### 3.3.2 Selection of Teachers

All full-time Level 1 teachers (with at least a diploma qualification) and Heads of Departments (HOD's) from the ten selected schools were invited to participate in the survey.<sup>1</sup>

A total of 415 questionnaires were distributed among the teachers of these schools. At the end of two weeks 381 questionnaires were returned. This represented a response rate of 91,80%. However, all these questionnaires could not be processed as eight of these were incomplete and four were filled in by members of staff who did not qualify to participate in this study. This left the researcher with 369 usable questionnaires.

In order to obtain an equal number of males and females in the final sample nine further questionnaires were eliminated using a random sampling procedure. Eight of these belonged to males and one to a female. Thus the final sample

---

1.

Teachers participating in the present study have been placed in one of two levels or ranks which reflect their position in the teaching hierarchy which currently exists in Indian secondary schools.

- (a) LEVEL 1: This category comprises educators who function mainly as classroom teachers.
- (b) LEVEL 2: This category is made up of Heads of Departments, each belonging to a specific subject area. In addition to teaching for a part of the day, they are responsible for certain administrative duties.

comprised 360 teachers, 180 males and 180 females. Table 3.2 shows the number of teachers drawn from the various schools.

TABLE 3.2

DISTRIBUTION OF THE SAMPLE DRAWN FROM TEN SECONDARY  
SCHOOLS IN THE GREATER DURBAN AREA

SECONDARY SCHOOL	TOTAL
Burnwood	43
Durban Girls'	36
Eastbury	41
Effingham	32
Glenover	34
Marklands	35
Meadowlands	32
Merebank	20
Solvista	47
Westham	40
<b>TOTAL</b>	<b>360</b>

The teachers were a mixture of individuals who varied in respect of sex, age, marital status, length of teaching experience, qualification, and rank. Table 3.3 furnishes more details relating to the teachers who comprised the sample.

A further analysis provided the following information :

1. An analysis of the sample on the basis of sex and rank revealed four subgroups. This distribution is presented in Fig. 3.2.

TABLE 3.3

## DEMOGRAPHIC DISTRIBUTION OF THE SAMPLE

DEMOGRAPHIC CHARACTERISTICS	TOTAL	PERCENTAGE
All teachers	360	100
<b>Sex</b>		
Male	180	50
Female	180	50
<b>Marital Status</b>		
Married	274	76
Single	86	24
<b>Age</b>		
20 to 24 years	80	8
25 to 29 years	135	38
30 to 39 years	118	33
40 years or more	77	21
<b>Teaching Experience</b>		
3 years or less	54	15
4 to 10 years	164	45,5
11 to 20 years	96	26,7
21 years or more	46	12,8
<b>Qualification</b>		
Diplomates	136	38
Graduates	116	32
Postgraduates	108	30
<b>Position held in school</b>		
Level 1 Teachers	300	83
Heads of Departments	60	17

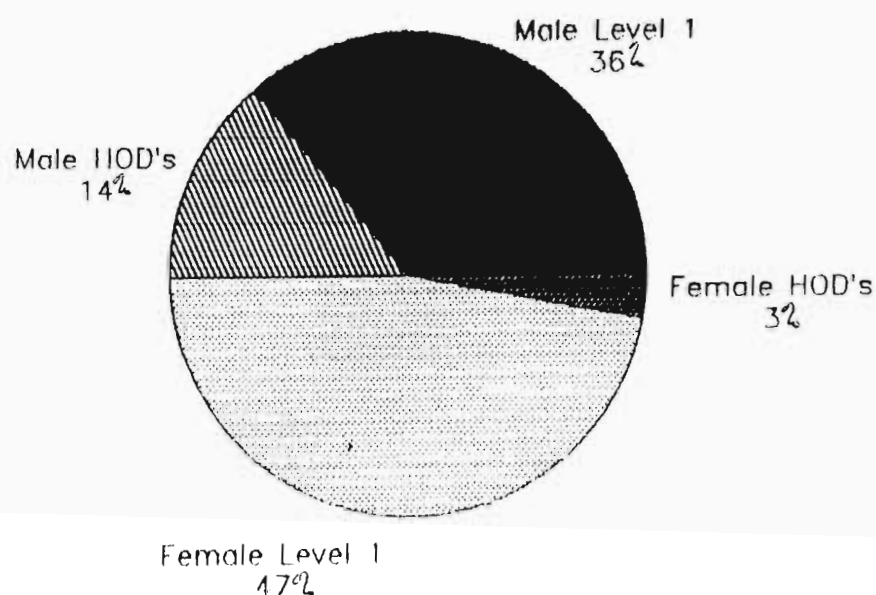


Fig. 3.2 COMPOSITION OF THE FOUR SUBGROUPS OF RESPONDENTS IN THE RESEARCH SAMPLE

2. 70% of the total sample ranged in age from 25 to 39 years. Of the 60 Heads of Departments 83% were 40 years or older.
3. Teaching experience within the total sample ranged from a few months to 35 years. The majority (59%) had four to fifteen years of teaching experience. Twelve (3%) had taught for more than 25 years.
4. 37% of the sample were engaged in part-time studies. Of these 34% were Level 1 teachers.



5. Only 4% of the sample did part-time work outside teaching.
6. Of the 300 Level 1 teachers, 8% had received one achievement recognition (merit) award, 2% had received two awards, and 2,3% three awards.

### 3.4 INSTRUMENTS USED IN THE STUDY

Data for this study were obtained through the use of a self-administered questionnaire and in-depth interviews.

#### 3.4.1 The Self-Administered Questionnaire

A four-part questionnaire entitled "Teacher Occupational Inventory" (TOI) was compiled covering various aspects relating to the teacher and his/her work environment. It was developed after a careful study of the literature, discussions with teachers and two pilot studies. Care was taken to ensure that the TOI was relevant, brief and straightforward and that the instructions were kept simple. The final version which was used in the main study is given in Appendix A. It sought information on the following : personal details of the subjects, their perceived sources of stress, the symptoms they displayed, their coping actions, their state of health and their feelings about teaching as a vocation.

Several available teacher stress measures were carefully examined with a view to using some of them in this study. These included Kyriacou's 51-item checklist (1978b) and his 33-item checklist used in a later study (1980b); Dunham's stress inventory (1984); Clark's 30-item "Teacher Occupational Stress Questionnaire" (1980); Fimian's "Teacher Stress Inventory" (1984); and the "Teacher Stress Measures" of Pettegrew and Wolf (1982).

None of these measures on its own was considered as being suitable for this South African-based study involving Indian teachers. Each instrument had merits and shortcomings. In many of these studies, for instance, the focus was on one or two components only. This study, on the other hand, called for an overall picture of stress - including sources, symptoms, coping behaviours, health, and sources of satisfaction/dissatisfaction. The researcher, therefore, decided to construct her own questionnaire, borrowing where appropriate, from the instruments of the above researchers. Part One of the TOI consists of three subsections. Subsection One requested biographical information relating to the respondent's age, sex, marital status, highest qualification, length of teaching experience, rank, number of merit awards received, and involvement in after-school studies and/or other activities.

The second and third subsections sought information on perceived sources of stress in the work situation. A 20-item checklist based mainly on the studies of Kyriacou and

Sutcliffe (1978b), called on the teachers to rate each source of stress on a three-point Likert scale ranging from *"Not stressful"* to *"Very stressful"*.

Another set of nine job-related statements measured perceived role-related sources of stress. These were selected from the instruments developed by Rizzo, House and Lirtzman (1970 : 150-163) and by Pettegrew and Wolf (1982 : 373-396). Three of the items dealt with role conflict (Items 11.1, 11.4 and 11.7), three with role ambiguity (Items 11.2, 11.5 and 11.8), and three with role overload (Items 11.3, 11.6 and 11.9). A three-point response mode labelled "Yes", "Not Sure" and "No" was used. Scores on each of the three Perceived Role subscales were calculated by summing the responses on each item that made up the subscale.

Part Two consists of two subsections : symptoms and coping behaviour. The first part consisted of a checklist made up of 12 symptoms of stress and is a modified version of the instruments used by Kyriacou and Sutcliffe (1978:166) and Dunham (1984 : 94-95). Here teachers were asked to indicate only those symptoms which they had experienced strongly during the past school year. The intention here was to ascertain which of the symptoms were most frequently manifested by Indian teachers when reacting to stress. Scores were calculated by summing the responses on each item after which they were rank-ordered.

Subsection two of Part Two investigated coping resources of teachers. The 12-item coping actions scale was derived from a longer scale of 33 items used by Kyriacou (1980). Teachers were asked to rate each item indicating how frequently they used such an action to cope with stress at school. A four-point scale was used: "Never", "Sometimes", "Often", and "Very Often". A coping score was calculated by summing the scores on each item and then rank-ordering them.

Part Three of the TOI examined the relationship between perceived stress and psychological well-being/distress using Goldberg's GHQ-12 (See Appendix A). These 12 items are balanced in terms of "agreement sets", ie. half of the questions are worded to indicate illness if answered "Yes" and half indicate illness if answered "No" (McDowell and Newell, 1987 : 140). Each item has four ordered response categories, and is scored 0-0-1-1 (zero for negative, and 1 for positive symptoms). According to their total score (the sum across all 12 items), respondents are generally classified "cases" or "non-cases". A cut off point of 2/3 has been tested for the GHQ-12 (McDowell & Newell, 1987 : 140). A respondent with a score of six or more is classified as a "case". Such individuals are very likely to be suffering levels of tension, anxiety and depression high enough to have an adverse effect on their physical and mental well-being.

The classification system adopted in studies by Tuettemann and Punch (1990 : 25-29) was used in this study, therefore "case"/"non-case" terminology was avoided through the use of the words "low", "medium" and "high" stress levels to describe respondents whose total GHQ scores were 0-2, 3-5 and 6-12 respectively. Respondents with GHQ scores equal to or greater than 6 were regarded as suffering severe psychological distress.

To enable an identification of specific symptom areas, the 12 symptoms of the GHQ-12 were further grouped to produce the following 3 stress clusters of symptoms : "loss of confidence" (Items 14.6, 14.8, 14.10, 14.11); "anxiety and unhappiness" (Items 14.1, 14.2, 14.5, 14.9, 14.12); and "social dysfunction" (Items 14.3, 14.4, 14.7).

Part Four of the TOI consists of four questions, two open-ended and two with multiple-choice divisions. In Questions 15 and 16, teachers were asked to answer two general open-ended questions : *"Which two aspects of teaching give you most satisfaction?"* and *"Which two aspects of teaching make you most unhappy?"* These two questions were intended to indicate job satisfaction/dissatisfaction, an important index of occupational stress. These two questions were included rather than a single-item self-reported measure of overall job satisfaction in order to identify, specifically, those aspects of teaching which

are perceived by teachers as contributing most to their overall satisfaction and overall dissatisfaction with teaching as an occupation.

Question 17 of Part Four *"How likely is it that you will still be a school teacher in ten years' time?"* was intended to provide a measure of intention to leave teaching, another important response correlate of occupational stress generally and teacher stress in particular (Bedeian et al., 19981; Kyriacou and Sutcliffe, 1977; 1979a). In this question teachers were asked to rate their response on a four-point scale labelled *"Very unlikely"*, *"Unlikely"*, *"Not sure"* and *"Very likely"*.

The last question (Question 18) asked teachers to rate their response to the question *"Overall, how stressful do you find teaching to be?"* on a three-point scale labelled *"Not stressful"*, *"Moderately stressful"* and *"Very stressful"*. The response to this question was used as an overall measure of self-reported stress in this study. This approach has been employed successfully in previous research (Kyriacou and Sutcliffe 1977, 1978b, 1979a, 1979b).

### 3.4.2 In-depth Interviews

This was an additional method of data-collection. A series of interviews were conducted after the self-administered questionnaires had been collected and the data analysed.

The purpose was to gather more information on specific items or areas in the study which were identified as worthy of closer scrutiny.

It was not always possible to interview those teachers who had participated in the study by filling in the TOI since they had been requested (for the sake of frank and honest answers) to remain anonymous. This is why they could not be identified and interviewed. It therefore became necessary to identify particular groups of teachers that the TOI-data showed held a particular point of view and then to interview a new set of teachers who resembled their characteristics. For example, if females differed significantly from males on Item 10.9 and the questionnaire study revealed that women found pupils' declining interest in schoolwork very stressful, then during the in-depth interviews women teachers were told about this and asked to give reasons for the distress that they felt. It is unlikely that the responses of the teachers interviewed would differ markedly from those that would have been given by the teachers who originally completed the TOI since, basically, they form part of the same population of teachers, working with the same kind of pupils in similar schools under the control of the same Education Department.

The interviews were conducted during June and July 1991. Altogether 30 teachers were interviewed, 16 males and 14 females. An attempt was made to select teachers as far as possible on the basis of the following variables : varied

lengths of teaching experience (0-3, 4-10, 11 years or more); married and unmarried male and female teachers; Level 1 Teachers and Heads of Departments teaching different subjects.

Each teacher was interviewed for 30-35 minutes at his/her school or home. Care was taken to create a non-threatening atmosphere and to establish good rapport with teachers so as to encourage them to give frank and honest responses. For this purpose the interviews were carried out on a one-to-one basis.

In order to obtain the necessary information an 'In-depth Interview Schedule' was drawn up to guide the discussion (Appendix B). Both open-ended and closed-type questions were included. The open-ended questions were directed mainly at obtaining information on the possible reasons for teachers' responses to particular items in the original TOI study.

The responses of interviewees to most questions were recorded manually on the Interview Schedule by the researcher-interviewer during the course of the interview. However, responses based on Questions 10 and 11 of the TOI (i.e. sources of stress) were tape-recorded, with the consent of the interviewees, for the following two reasons:

- i) to avoid wasting the interviewees' time by laboriously transcribing their responses; and



- ii) to enable the researcher-interviewer to analyse the responses in greater detail later.

As mentioned in Chapter One, the findings derived from the interviews will be weaved into the quantitative findings of the study.

### 3.5 THE PILOT STUDIES

At each stage of the research project attempts were made to minimize the likelihood of problems and errors in the main study and to maximize the reliability of the findings. In this respect the pilot studies were invaluable. They helped to refine the instruments that were used in the main study and gave the researcher a good knowledge of the way in which she could get optimum co-operation from the respondents.

The pilot studies covered the following aspects :

- i) Pretesting the Questionnaire (TOI) in order to discover possible ambiguities and other problems that may be encountered in the course of the main study.
- ii) Pretesting the interview procedure to be adopted when conducting the in-depth interviews.

The TOI was modified on the basis of suggestions made by secondary school teachers who participated in the two pilot studies. The major alterations had to be effected after the

first pilot study. All the respondents felt that the questionnaire, though meaningful and clearly understood, was time-consuming. It took 40-45 minutes to complete. Consequently, the number of items in each section had to be reduced. This was done in the following way : Question 10 (Sources of stress) had to be reduced from 32 to 20 items; Question 12 (Symptoms of stress) from 29 to 12 items; Question 13 (Coping actions) from 30 to 12 items. Furthermore, it was decided to use the 12-item version of the GHQ, rather than the longer GHQ-30.

Changes were also effected to Question 11 (Role-related sources of stress) where some items were substituted by other, more relevant ones. Moreover, the wording of some statements had to be changed. Examples include the following :

- (a) *"My Principal or Head of Department"* to *"my superior"* so as to make it applicable to both Level 1 teachers and Heads of Departments, and
- (b) *"I feel that my job interferes overly with my FAMILY life"* to *"... my HOME life"* to make it applicable to both married and unmarried teachers.

In the second pilot study, respondents reported that it took them about 15-20 minutes to complete the questionnaire. Apart from a few minor changes in the wording of certain items, it was decided that the questionnaire used in the second pilot study was suitable for use in the main study.

In the GHQ-12 the instructions were modified to read : "*We should like to know how your health has been in general over the past 3 months ...*" instead of "*over the past few weeks*". This was done as some respondents felt that a "*few weeks*" was too short a period over which to give reasonably accurate responses.

The final version of the questionnaire is reproduced in Appendix A.

### 3.6 CONTROL PRECAUTIONS

In order to ensure that the fieldwork would proceed smoothly, various precautions were taken. The researcher visited the principals of the ten schools participating in the study a month beforehand to secure their co-operation and to remind them that the project had the approval of the Chief Executive Director. She also discussed details of the study with them and set a date and time when she could meet with the staff to give them the questionnaire. A few days before this visit, the Principals were telephoned and reminded of the arrangements. The fact that the researcher addressed the teachers personally helped to establish rapport with them. This, perhaps, was the main factor contributing to the high response rate of 91,80%.

In order not to add to the Principals' tasks and to remove any apprehension a teacher may have felt about handing in the completed questionnaire to his/her Principal, the researcher arranged for the School Guidance Counsellor or the School Clerk to collect the questionnaires.

During processing of the data every effort was made to anticipate possible sources of error. Steps were then taken to eliminate them or, at least, to minimize their effects. For example, completed questionnaires were carefully scrutinized for errors, omissions and non-responses before they were coded and the data entered on the data sheets.

### 3.7 FIELDWORK AND THE ADMINISTRATION OF THE QUESTIONNAIRE

The field work was conducted during the first two weeks of September 1990, a time when schools are relatively free of the pressures of examinations.

All the principals, except one, agreed to arrange a brief staff meeting so that the researcher could personally hand out the questionnaires. In the one school, the Senior Guidance Counsellor handed out the questionnaires to the teachers on behalf of the researcher.

At the staff meeting each Level 1 teacher and Head of Department was handed a questionnaire, a cover letter explaining the reason and the procedure for answering the questionnaire and a large envelope. During the brief

introduction, the researcher informed the teachers of the following : that participation was voluntary, that questionnaires were to be completed anonymously after which they were to be placed in the envelope, sealed and returned to the Guidance Counsellor (or School Clerk). A date was set by mutual agreement when the completed questionnaires were to be collected by the researcher. Most of the schools responded very well. In a few cases where delays were experienced, reminders had to be sent before outstanding questionnaires were returned.

Feedback from some Guidance Counsellors, teachers and administrators indicated that the TOI was a good instrument, requiring only a short while to complete and very interesting. Many of the teachers made it known that they enjoyed answering the questions.

After the data were collected, they were coded and analyzed. The findings of the present study will be discussed in the next two chapters. Chapter Four deals with the results in respect of the first four aims of this research as set out in Chapter One. These aims relate mainly to Part One of the TOI and are concerned with the incidence of self-reported stress among teachers in the sample as well as their perceived sources of stress.

Chapter Five presents the findings in respect of the last four aims and correspond to Parts Two, Three and Four of the TOI. These sections relate more to how teachers in the

sample perceive the experience of stress and cover aspects such as teachers' perceived symptoms of stress, their coping behaviours, their health, as well as their perceived sources of satisfaction and dissatisfaction in teaching.

## CHAPTER FOUR

### FINDINGS OF THE PRESENT STUDY

#### INCIDENCE AND OCCUPATIONAL CORRELATES OF STRESS

As stated in Chapter One this research has eight main aims. Each of these aims has been stated in the form of a research question so as to facilitate the organisation of the data and give greater direction to the nature of the answer that needs to be given. The data required to answer each question is contained in different sections of the Teacher Occupational Inventory (TOI), the main instrument used to gather information for this study (Appendix A). Thus the general organisation of the questionnaire and its subdivisions correspond closely with the order in which the aims of the study are stated. The same order has been retained in the discussion of the results.

It will be recalled that the TOI was divided into the following four parts.

- a. Part One was mainly concerned with obtaining personal details of the teachers participating in this study. Information was also obtained on the degree of stress they experienced in twenty specially selected job-related tasks or situations. Another set of nine items tapped their feelings about certain role-related

situations which, from a review of the literature, appeared to be particularly useful in discriminating between teachers who were satisfied with their jobs and those who were not.

- b. In Part Two the respondents indicated, from a given list, those symptoms of stress which they had displayed strongly in the school situation over the past year. In addition, they had to indicate the frequency with which they used certain actions and behaviours to cope with stress at school.
- c. In Part Three the participants were presented with twelve items pertaining to psychological health. They had to rate themselves on these according to how well they felt over the past three months.
- d. Part Four comprised :
  - i) two open-ended questions inviting the respondent to mention two aspects of teaching which gave him/her most satisfaction, and two aspects which gave the most dissatisfaction;
  - ii) two forced-choice questions investigating, firstly, the likelihood that the teacher would still be in the profession ten years from the time of this study and, secondly, how stressful he/she found teaching to be.

Owing to the mass of data that had to be handled, it was decided to extend the presentation of the results of this study over two chapters. Data pertaining to the first four aims are analysed in Chapter Four while those pertaining to



the remaining four aims are analysed in Chapter Five. In relation to the TOI, information linked to the first four aims belong mainly to Part One while information linked to the last four aims belong to Parts Two, Three and Four.

The discussion which follows in Chapter Six includes comments that are related to the findings of Chapters Four and Five combined. Such a structure permits the researcher greater freedom to link up ideas that are related to one another without being restricted to chapter divisions.

The present chapter will attempt to answer the following questions :

1. What is the incidence of self-reported stress among Indian secondary school teachers? (Question 18)
2. Are there intra-group differences in the incidence of self-reported stress based on sex, marital status, age, teaching experience, qualification, and position held in school? (Questions 1 to 6)
3. To what extent do selected job-related tasks and situations create stress in teachers? (Question 10)
4. Which role-related situations do teachers identify as contributing most to feelings of perceived stress? (Question 11)

As stated in Chapter One, the influence of biographical characteristics on teachers' perceptions of stress would be made by means of intra-group comparisons involving the following subsamples : male-female, married-unmarried,

younger-older, less experienced-more experienced, diplomates- graduates, low rank-high rank. In order to reduce the tedium of an exhaustive listing of the results, only significant differences will be cited. Consequently, it may be assumed that if a comparison (e.g. male vs female teachers) is not referred to specifically, then any difference observed was minimal.

Where necessary, the quantitative analysis will be supplemented by qualitative data obtained through in-depth interviews.

1. THE INCIDENCE OF SELF-REPORTED STRESS AMONG INDIAN SECONDARY SCHOOL TEACHERS : FINDINGS RELATED TO THE TOTAL SAMPLE

A knowledge of the incidence of stress among teachers is the first essential for, without it, the planning and implementation of remedial measures would be difficult. To date, no extensive or detailed survey of a scientific kind of the incidence of stress among Indian secondary school teachers has been undertaken.

In spite of the lack of such data, there has been an awareness of the need, on the part of the Department of Education and Culture and some school administrators, to assist teachers experiencing abnormal levels of stress. In 1989 the Department of Education and Culture, for instance, included the subject of teacher stress as one aspect of a

workshop held for principals in order to sensitise them to the problem of stress among school teachers. In addition, administrators in some secondary schools have taken the initiative to include this topic in their staff development programmes.

Research data collated in a scientific manner will not only enhance the effectiveness of these efforts but would also provide the impetus for establishing resources to assist those teachers who require assistance on account of stress.

In this study the prevalence of self-reported stress was assessed through Question 18 in the Teacher-Occupational Inventory : "Overall, how stressful do you find teaching to be?"

The responses of the total sample to this question are given in Table 4.1

TABLE 4.1

SELF-REPORTED TEACHER STRESS : DISTRIBUTION OF RESPONSES  
FOR THE SAMPLE

NOT STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	TOTAL N
15 (4%)	152 (42%)	193 (54%)	360

This distribution indicates that occupational stress is widespread among Indian teachers in secondary schools. Over half of the sample report that they are "very stressed".

Only 4% report no stress. It is reasonable to expect that high levels of stress adversely affect teachers in the job situation.

This result is consistent with the findings of Kyriacou and Sutcliffe (1978b, 1979), Dunham (1984), Farber (1984), Laughlin (1984) and Otto (1986).

## 2. THE INCIDENCE OF SELF-REPORTED STRESS : FINDINGS RELATED TO DEMOGRAPHIC SUBGROUPS

### 2.1 Overall Findings

The distribution of responses to the question "Overall, how stressful do you find teaching to be?" as well as the mean ratings and standard deviations for the total sample and six subgroups, are shown in Table 4.2.

An examination of the data shows that general feelings of stress are widespread among Indian teachers in secondary schools, irrespective of demographic subgroup. These findings are consistent with those of Kyriacou and Sutcliffe (1978b, 1979) and Laughlin (1984).

### 2.2 Findings Related to Subgroups

To investigate whether there are significant differences in the responses based on the biographic characteristics of the subjects, it was decided to analyse the data in greater

detail. The independent variables were sex, marital status, age, teaching experience, qualification, and rank. For this purpose appropriate levels of chi-square tests were used.

On the basis of a review of the literature it was hypothesised that more women than men teachers would report experiencing greater levels of stress. However, contrary to expectations and the findings of Laughlin (1984), Kyriacou and Sutcliffe (1978b; 1979) and Trendall (1989:55), no significant sex differences were found. Males and females showed similar perceptions of work stress. Nor were significant differences found in respect of age, teaching experience, qualification and rank. The only exception related to marital status.

There is a significant difference in the responses of married and single teachers in respect of the frequency and intensity of self-reported stress ( $\chi^2 = 6,3$ ;  $p < 0,05$ ). More married teachers (95,5%) perceive teaching as very stressful. This can probably be explained by the fact that married teachers have to fulfill more roles since, in addition to their teaching duties, they have major responsibilities relating to home and family. This leaves them with little time to attend to themselves. Single teachers, on the other hand, may have more leisure time during which to pursue their own interests. This, presumably, counteracts some of the harmful effects of stress.

TABLE 4.2

SELF-REPORTED TEACHER STRESS : DISTRIBUTION OF RESPONSES AND  
MEANS FOR THE TOTAL SAMPLE AND SUBSAMPLES

DEMOGRAPHIC CHARACTERISTICS	N	NOT STRESSFUL %	MODERATELY STRESSFUL %	VERY STRESSFUL %	MEAN <sup>*</sup>	SD
ALL TEACHERS	360	4,2	42,2	53,6	2,49	0,58
<u>SEX</u>						
Male	180	3,3	42,4	54,4	2,51	0,56
Female	180	5,0	42,2	52,8	2,48	0,59
<u>MARITAL STATUS</u>						
Married	274	2,6	44,2	53,6	2,51	0,55
Single	86	9,3	37,2	53,5	2,44	0,66
<u>AGE</u>						
20-24 years	30	6,7	36,7	56,7	2,50	0,63
25-29 years	135	3,0	34,8	62,2	2,59	0,55
30-39 years	118	4,2	44,9	50,9	2,47	0,58
40 years or more	77	5,2	53,2	41,6	2,36	0,58
<u>TEACHING EXPERIENCE</u>						
3 years or less	54	5,6	33,3	61,1	2,56	0,60
4-10 years	164	3,0	36,6	60,4	2,57	0,56
11-20 years	96	5,2	49,0	45,8	2,41	0,59
21 years or more	46	4,3	58,7	37,0	2,33	0,56
<u>QUALIFICATION</u>						
Diplomates	136	5,1	36,0	58,8	2,54	0,59
Graduates	116	2,6	43,1	54,3	2,52	0,55
Postgraduates	108	4,6	49,1	46,3	2,42	0,58
<u>POSITION HELD IN SCHOOL</u>						
Level 1 Teacher	300	4,7	40,7	54,7	2,50	0,59
Head of Department	60	1,7	50,0	48,3	2,47	0,54

\* Values range on a rating scale from 1(not stressful) to 3(very stressful)

### 3. JOB-RELATED TASKS OR SITUATIONS AND STRESS

#### 3.1 Overall Findings Related to Complete List of Stressors

The mean ratings of teachers' responses to the 20 task- and situation-based sources of stress are shown in Table 4.3. The responses for each item ranged from "not stressful" to "very stressful".

The four most frequent and intense sources of stress and dissatisfaction in rank order are : the system of awarding merit notches; the system of promotion; the system of evaluation; and salary. All these stressors relate to working conditions of teachers rather than to the actual task of teaching.

These findings are comparable to those of Kyriacou and Sutcliffe (1978b:163) who found that "poor career structure" was one of the major sources of stress among teachers. Salary and promotion have also been reported as major sources of dissatisfaction in studies by Lortie (1975:182), and Galloway et al. (1985:46).

A noteworthy feature is the point that hardly any study in the literature gives merit notches, promotion, evaluation and salary taken together, as a unit of stress among teachers. This combination of prime concerns appears to be unique to Indian secondary school teachers.

TABLE 4.3

## TASK AND SITUATION-BASED SOURCES OF STRESS : RANK ORDER OF ITEMS AND MEANS

RANK ORDER	ITEM NO.	SOURCE OF STRESS	MEAN*	SD
1	10.8	Present system of awarding merit notches	2,76	0,50
2	10.7	Present system of promotion	2,72	0,52
3	10.6	Present system of evaluation	2,71	0,54
4	10.15	The salary you receive in relation to the amount of work you do	2,69	0,53
5	10.11	Limited time at school for preparation and marking	2,67	0,57
6	10.1	Record-keeping & clerical work	2,66	0,53
7	10.16	Some parents' lack of interest in progress/ behaviour of their children	2,55	0,62
8	10.13	Demands on your time by non-teaching activities	2,54	0,63
9	10.9	Some pupils' declining interest in school work	2,52	0,60
10	10.10	Being accountable for pupils' performance	2,51	0,67
11	10.18	Teaching pupils of widely divergent abilities in same class	2,49	0,63
12	10.17	Serving relief for absent teachers	2,37	0,71
13	10.12	Time limits set for completing tasks	2,33	0,67
14	10.14	Insufficient opportunity for participation in decision-making	2,27	0,71
15	10.20	Opinion held by others of teaching profession	2,23	0,74
16	10.19	Teaching facilities and resources at your school	2,12	0,70
17	10.2	Dealing with student discipline problems	1,97	0,73
18	10.3	Attitudes of the Principal towards you	1,68	0,71
19	10.4	Relating to your HOD/immediate superior	1,44	0,64
20	10.5	Attitudes of other members of staff towards you	1,21	0,44

\* Values range on a rating scale from 1(not stressful) to 3(very stressful)

Table 4.3 also shows that the three stressors with the lowest rankings (i.e. attitudes of principal; relating to your Head of Department or immediate superior; and attitudes of other members of staff towards you) relate to interpersonal relationships in the school situation.



In the discussion that follows, items with common themes have, for convenience, been grouped together. These items appear in the Teacher-Occupational Inventory (Appendix A). The categories are as follows :

A    Career Development Pressures

- A1    Present system of evaluation (Item 10.6)
- A2    Present system of awarding merit notches (Item 10.8)
- A3    Present system of promotion (Item 10.7)
- A4    The salary you receive in relation to the amount of  
         work you do (Item 10.15)

B    Time and Workload Pressures

- B1    Limited time available at school for preparation and  
         marking (Item 10.11)
- B2    Record-keeping and clerical work (Item 10.1)
- B3    Demands on your time by non-teaching activities  
         (Item 10.13)
- B4    Serving relief for absent teachers (Item 10.17)
- B5    Time limits set for completing tasks (Item 10.12)

C    Student-Related Pressures

- C1    Some parents' lack of interest in the progress/  
         behaviour of their children (Item 10.16)
- C2    Some pupils' declining interest in schoolwork  
         (Item 10.9)
- C3    Being accountable for pupils' performance (Item 10.10)
- C4    Teaching pupils of widely divergent abilities in the

same class (Item 10.18)

C5 Dealing with student discipline problems (Item 10.2)

D Organizational Structure and Climate

D1 Insufficient opportunity for participation in decision-making (Item 10.14)

D2 Teaching facilities and resources (Item 10.19)

D3 Opinion held by others of the teaching profession (Item 10.20)

E Interpersonal Relationships

E1 Attitudes of the Principal towards you (Item 10.3)

E2 Relating to your Head of Department/immediate superior (Item 10.4)

E3 Attitudes of other members of staff towards you (Item 10.5)

It will be noticed that there is a degree of overlap between the items in the various categories. For example, although stressors such as "dealing with student discipline problems", "some pupils' declining interest in school work", "teaching pupils of widely divergent abilities in the same class" and "some parents' lack of interest in the progress/behaviour of their children" are categorized here under "Student-related pressures", they may also be considered to be "Time and workload pressures" as these stressors also deprive the teacher of valuable teaching time and increase his workload. This overlap highlights the interrelatedness of the wide range of factors that combine

to produce stress. In the sections that follow, the discussion is based on each category of items. However, certain items within these categories are singled out for closer examination if they are found to have special interest value.

### 3.2 Overall Findings Related to Subgroups

Overall, intra-group comparisons in respect of the six demographic subgroups revealed that there were no significant differences for thirteen of the twenty stressors. This indicates that the majority of the teachers surveyed face similar stress-producing sources. In the case of the remaining seven stressors only twelve points of statistical significance were found. These related to promotion, evaluation, salary, being accountable for pupils' performance, opportunity for participation in decision-making, availability of teaching facilities and resources, and dealing with student discipline problems. The foregoing information is summarised in Table 4.4.

#### A. Career Development Pressures

Teachers' motivation and their professional effectiveness are important factors in maintaining high quality performance in the classroom (Blase, 1982; Cherniss, 1980; Lortie, 1975).

TABLE 4.4

SUMMARY OF SIGNIFICANT RESULTS OBTAINED FROM  $\chi^2$  ANALYSES  
OF TASK- AND SITUATION-BASED STRESSORS FOR THE  
SIX DEMOGRAPHIC SUBGROUPS

ITEM NO	SOURCE OF STRESS	SEX	MARITAL STATUS	AGE	TEACH. EXP.	QUAL.	RANK
10.8	Present system of awarding merit notches						
10.7	Present system of promotion			7,90*			
10.6	Present system of evaluation	5,05*	5,60*		16,88***		
10.15	Salary			11,94***	18,28***		12,39**
10.11	Limited time at school for preparation & marking						
10.1	Record-keeping and clerical work						
10.16	Some parents' lack of interest in the progress/behaviour of their child						
10.13	Demands on your time by non-teaching activities						
10.9	Some pupils' declining interest in schoolwork						
10.10	Being accountable for pupils' performance					10,06***	
10.18	Teaching pupils of widely divergent abilities in same class						
10.17	Serving relief for absent teachers						
10.12	Time limits set for completing tasks						
10.14	Insufficient opportunity for participation in decision-making	7,91***		11,35***	11,48***		27,43**
10.20	Opinion held by others of teaching profession						
10.19	Teaching facilities and resources at your school			7,95*			
10.2	Dealing with student discipline problems			18,91***	17,18***		
10.3	Attitudes of the Principal towards you						
10.4	Relating to your HOD/immediate superior						
10.5	Attitudes of other members of staff towards you						

\* :  $p < 0,05$       \*\*\* :  $p < 0,01$

In return for their efforts, teachers expect to earn both intrinsic and extrinsic rewards. Most teachers obtain their intrinsic rewards from the task of teaching itself, mainly through transmitting knowledge to students, achieving success with them, and being of service to them.

Bandura points out that efficiency is not entirely an internal construct; it relies on environmental response that acknowledges good performance (1982:40). However, the organizational structure of the teaching profession is relatively "flat" and this makes it difficult for teachers to experience professional accomplishment and success. As a result teachers accumulate few indications of career movement over time.

The low probability of acquiring extrinsic rewards for their efforts in the form of good evaluation assessments, merit awards, promotions and salary increases can be stress-inducing to teachers. This appears to be supported by the findings of the present survey and the data that were given earlier in Table 4.3.

The findings of this study relating to the present system of evaluation, the present system of awarding merit notches, the present system of promotion as well as salary will now be examined in greater detail.

## A1 The Present System of Evaluation

### a) Overall findings

Teacher evaluation practices such as interviews and performance appraisal procedures may be perceived as threatening and stressful situations generating anxiety, frustration and aggression (Gowler and Legge, 1980:213).

This becomes particularly evident in the present study where the vast majority of teachers (96%) perceived the present system of evaluation to be moderately (22%) or very stressful (74%). The response "not stressful" was given by just 4% of the teachers surveyed.

This finding is reinforced when one considers that the first four placings in the rank list of stressors are filled by the system of merit awards, promotion, evaluation and salary. These four variables are closely linked to one another in the teaching situation. In Indian Education good evaluation ratings are extremely important to achieve the following rewards : granting of permanent tenure in the case of probationers (confirmation); granting of merit awards to more experienced teachers with the concomitant monetary and status benefits; and promotion as a reward for hard work done.

This interrelatedness between the aspects of evaluation, merit awards and promotions particularly, became evident during the interviews when respondents used these three terms interchangeably to express their unhappiness and dissatisfaction. The following comments illustrate the feelings of some teachers on the system of evaluation.

*"I think that the most important reason why there is so much unhappiness about evaluation is because it is obligatory. Evaluation is forced upon you whether you want it or not. The new teacher is also not given much chance to experiment with methods and techniques in his teaching. In his second year of teaching he is subjected to evaluation".*

(Male HOD : 30 years' experience)

*"I think that the main complaint is that the evaluation instrument used is very subjective. Despite having an instrument, one still finds people who don't deserve getting merit awards or promotion. So one wonders if it's worth going through all that stress".*

(Female Teacher : 14 years' experience)

*"The evaluation system is not objective. Your principal may see you once or twice while your HOD sees you more often. Your principal may be biased and his evaluation score not fair".*

(Female Teacher : 3 years' experience)

*If you do not see eye to eye with your principal, you may be victimised".*

(Female Teacher : 9 years' experience)

*The evaluation scores have to be moderated. I feel a moderator is not in a position to moderate because he may not know me in the first instance. He cannot come here on one day and say : Mr ....., this is what your score should be, because he cannot quantify my personality.... Secondly, he cannot, in the process of sitting on one day only, tell me whether I'm a good teacher or not".*

(Male Teacher : 11 years' experience)

*For evaluation, it is laid down categorically that you will be evaluated for extra-curricular activities. This creates stress in that you have to motivate yourself to get involved in these activities. You HAVE to do it. It's not a matter of whether you want to do it ...".*

(Male Teacher : 3 years' experience)

b) Findings related to subgroups

A further analysis of the data revealed significant relationships between teachers' perceptions of the stress they experienced as a result of the present system of



evaluation and the demographic characteristics of sex, marital status and teaching experience.

(i) Male vs female teachers

Data relating to male and female teachers and their level of reported stress are presented in Table 4.5.

TABLE 4.5

SEX AND PERCEIVED STRESS ARISING FROM THE PRESENT SYSTEM  
OF EVALUATION

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
Male	3 (2,1)	140 (97,9)	143 (100%)
Female	11 (7,9)	128 (92,1)	139 (100%)
T O T A L	14 (5,0%)	268 (95%)	282

$$x^2 = 5,1$$

$$df = 1$$

$$p < 0,05$$

The table shows that there is a significant difference between males and females in respect of how they perceive the present system of evaluation ( $x^2 = 5,1$ ;  $p < 0,05$ ). More males appear to find it "very stressful" (98% vs 92%). This may be due to the fact that in many households the male is still the sole breadwinner. As a family man, the extra money gained through the award of a merit notch or promotion, is important in helping him meet his financial commitments. Moreover, it raises his self-esteem and status among his colleagues, family members and friends. For some

women, on the other hand, teaching may be a means of earning supplementary income to ensure a higher standard of living, hence the somewhat lower pressure on them to earn an extra notch or two.

(ii) Married vs Single Teachers

Data relating to the marital status subgroups are presented in Table 4.6.

**TABLE 4.6**  
**MARITAL STATUS AND PERCEIVED STRESS ARISING FROM THE**  
**PRESENT SYSTEM OF EVALUATION**

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
Married	7 (3,3)	208 (96,7)	215 (100%)
Single	7 (10,4)	60 (89,6)	67 (100%)
T O T A L	14 (5%)	268 (95%)	282 (100%)

$$x^2 = 5,60 \quad df = 1 \quad p < 0,05$$

Table 4.6 shows that more married teachers than single teachers (97% vs 90%) find the present system of evaluation very stressful ( $x^2 = 5,6$ ;  $P < 0,05$ ).

A probable reason for this could be that married teachers, unlike single teachers, are generally older and are often faced with persistent family demands and additional

financial obligations such as bond payments and costs incurred by children; at the same time their chances of increasing their salary through annual increments and merit notches are severely limited. Hence there is hence pressure on them to earn more money. Many single teachers, both bachelors and spinsters, may not have such family demands; hence the pressure on them to earn more is not as compelling as in the case with their married colleagues. Presumably, this results in a lower stress level among them.

The interviews revealed another possible and interesting reason : because of their teaching and home commitments, married teachers often have less leisure time to engage in stress-reducing activities compared to single teachers.

### iii) Less Experienced vs More Experienced Teachers

Data relating to the teaching experience subgroups are presented in Table 4.7.

The table shows that while the vast majority of teachers in all four teaching experience categories perceive the present system of evaluation as being very stressful, more teachers in the 4-10, 11-20 and 21+ years experience categories (94% - 98,5%) perceive it to be more stressful compared to beginning teachers in the 0-3 years category (82,5%). Conversely, a greater proportion of beginning teachers (17,5%) compared to teachers in the other three categories

(1,5% - 6%) perceive the system of evaluation as relatively less stressful. This difference is highly significant ( $\chi^2 = 16,88$ ;  $p < 0,01$ ) and may be attributed to various factors.

**TABLE 4.7**  
**TEACHING EXPERIENCE AND PERCEIVED STRESS ARISING FROM**  
**THE PRESENT SYSTEM OF EVALUATION**

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
0-3 years	7 (17,5)	33 (82,5)	40 (100%)
4-10 years	2 (1,5)	130 (98,5)	132 (100%)
11-20 years	3 (3,9)	73 (96,1)	76 (100%)
21+ years	2 (5,9)	32 (94,1)	34 (100%)
T O T A L	14 (5,0%)	268 (95%)	282

$$\chi^2 = 16,88 \quad df = 3 \quad p < 0,01$$

Beginning teachers with 0-3 years teaching experience may not yet have the career advancement aspirations and pressures of teachers who have been in the profession for a longer period. As developing teachers, they expect and accept criticisms and suggestions from their superiors more readily. Moreover, because of their inexperience, they are generally given low profile classes, tasks and duties. As a result there is less pressure on them to perform at certain expected levels. This is evidenced by the somewhat lower percentage of teachers who have indicated that they find the system of evaluation very stressful.

As teachers gain in experience (from 4-10 years onwards), they become aspirant candidates for merit awards and promotion. This makes them more alert to the validity of evaluation procedures and instruments that are used to assess their worth. Because of their relatively greater experience, these teachers are given more high profile duties such as matric teaching and other non-teaching duties. As a result of their greater efforts, their expectations for reward may be higher. Moreover, apart from these new demands that they have to come to terms with in the school situation, further and new demands are also made on them in their personal lives. These include marriage, raising a family, and setting up a home. Consequently, there is greater pressure on them.

However, as these teachers gain in experience, in skills relating to teaching and coping, and instability in their professional and personal lives, the pressure on them often diminishes as is evidenced by the decreasing frequency and degree of stress in teachers in the 11-20 and 21+ year categories. The fact that there is a somewhat lower percentage of teachers in the 21+ years category (94%) than in the 4-20 year age range (96% - 98,5%), may be attributed to the fact that a large proportion of teachers in the 21+ year category are HOD's who may have already moved up one rung on the promotion ladder. As a result there is no longer any pressure on them to achieve the three merit awards.

A2 The present system of awarding merit notches

The merit pay system was introduced into schools to reward teachers who are particularly competent. It was hoped that providing monetary incentives would increase teachers' motivation to excel in their jobs and provide them with a sense of growth and development in their careers (Bacharach and Shedd, 1986:563; Bacharach, Bauer & Shedd, 1986:241-243; Conley, Bacharach & Bauer, 1989:58-59).

At present, Level 1 teachers in Indian schools can work towards a maximum of three merit notches. The number of merit awards achieved can play an important role in a teacher's promotional prospects.

In the present study the system of awarding merit notches appears to be the most important generator of stress among teachers since it was ranked number one in the list of stressors. The distribution of the responses of the total sample is given in Table 4.8.

TABLE 4.8

THE SYSTEM OF AWARDING MERIT NOTCHES : DISTRIBUTION  
OF RESPONSES FOR THE TOTAL SAMPLE

NOT STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	TOTAL N
12 (3,3%)	62 (17,2%)	286 (79,4%)	360

This distribution indicates that the overwhelming majority of teachers (97%) found that the present system used to award merit notches is moderately or very stressful. Just over 3% of the respondents did not perceive the system as stressful. The importance of this factor as a stress point is highlighted by the results of a further analysis: when the data relating to subgroups are compared on the basis of the six demographic variables (sex, marital status, age, length of teaching experience, qualification and rank), there was not one occasion when statistical significance was found (Table 4.4). This suggests that teachers in all subgroups perceive this factor to be unambiguously stressful.

Basically the same complaints which were given above against the system of evaluation, were also given against the system of awarding merit notches. The following are just a few of the many comments made by teachers during the interviews:

*"Many teachers work hard but are overlooked. Each HOD or Principal evaluates a teacher according to his standard, hence subjectivity sets in".*

(Male Teacher : 7 years' experience)

*It's an unfair system. In my ten years of teaching I have given my best but I have nothing to show for this ... I feel I should have been given some degree of recognition for my hard work".*

(Male Teacher : 10 years' experience)

*Merit awards create competition and division amongst staff".*

(Male Teacher : 14 years' experience)

### A3 Present system of promotion

#### a) Overall findings

Getting passed over for promotion can be very threatening to teachers since this makes self-evaluation and self-judgement more immediate and personal. Research has shown that when teachers' needs for self-actualization and self-esteem are unfulfilled, there is a higher probability of burnout. Feelings of lowered self-esteem, alienation, depression and greater job dissatisfaction are engendered (Bailey & Bhagat, 1987:209; Chakravorty, 1989:79; Farber, 1983:325; Ianni & Reuss-Ianni, 1983:93).

Table 4.3 shows that the vast majority of Level 1 teachers and HOD's (96%) perceive the present system of promotion as a source of moderate or considerable stress. The reasons for their dissatisfaction relate to the following : unfairness in the system of promotion; subjectivity; favouritism; nepotism; political considerations; the constantly changing criteria used for deciding on promotions; lack of recognition of teachers' efforts; and sex discrimination.



The following excerpts reflect the feelings of some teachers on this issue :-

*"Young teachers are being promoted, but I am being overlooked. You teach for so long, but you don't get any recognition or reward. You just drift in this profession".*

(Male Teacher : 14 years' experience)

*"I believe that when someone is promoted, it must be based on merit ... not because a teacher is old or based on some other compassionate grounds ...".*

(Male Teacher : 11 years' experience)

*"Teachers are very reliant on the kind of evaluation given by Upper Management. It is all so secretive. This adds to your stress ... With both promotions and merit awards, there is more emphasis placed on male teachers compared to females".*

(Female Teacher : 14 years' experience)

b) Findings related to Subgroups

Significant differences between the different age groups on the variable relating to the present system of promotion were noted ( $p < 0,05$ ). Details are provided in Table 4.9.

TABLE 4.9  
AGE AND PERCEIVED STRESS ARISING FROM THE PRESENT  
SYSTEM OF PROMOTION

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
20-24 years	2 (8,7)	21 (91,3)	23
25-29 years	6 (5,9)	96 (94,1)	102
30-39 years	0 (0)	99 (100)	99
40+ years	5 (8,2)	56 (91,8)	61
T O T A L	13 (4,6%)	272 (95,4%)	285

$$\chi^2 = 7,90$$

$$df = 3$$

$$p < 0,05$$

While the majority of teachers in all age groups in the sample perceive the present system of promotion to be very stressful, those teachers in the middle age range (25-39 years) perceive this to be more stressful than either beginning teachers in the 20-24-year age group or the oldest teachers in the 40-year+ age group. This may be explained by the fact that beginning teachers tend to focus their attention more on developing their teaching skills than on promotion, whilst the older teachers in the 40- year+ age range consist mostly of HOD's (83,3%) who have already attained their first promotion; hence stress in these two groups may be relatively lower.

However, 25-39 years is a critical stage in a teacher's occupational life. Many teachers probably consider themselves to be promotion-worthy and ready to take on additional challenges because of their teaching experience, skills and qualifications. Many are also married with additional home and family commitments; attaining promotion therefore would not only augment their salary to meet these commitments, but enhance their status and self-esteem among colleagues, family members and friends. However, the opportunities for promotion in teaching are severely limited and such teachers may perceive the obstacles towards realizing their ambitions to be very stressful.

#### **A4    Salary**

##### **a)    Overall Findings**

Teachers' salary increases are relatively lower, over time, when compared to the increments obtained by similarly qualified personnel in non-educational organizations. There is also evidence that this gap will increase as teachers' salaries are increasing at a slower rate than are salaries in other sectors of the economy (Milstein, 1985:16; Lortie, 1975). Although these statements refer to the American situation, the interviews indicated that a similar situation exists among Indian teachers in South Africa. This is of concern because it affects teachers' abilities to provide for family needs, especially in the present inflationary climate.

The findings of the present study indicate that by far the majority of teachers in the sample (97%) see themselves earning a disproportionately lower salary when considered against the nature and amount of work they do. The interviews indicated that this is a source of great dissatisfaction and stress.

*"With my B.Com degree I would have done very well in the private sector, but by some fate I ended up in teaching".* (Male Teacher : 7 years' experience)

*"I am a double graduate and I feel if I go into industry, I'll be earning more. I work very hard at school. I also do schoolwork after school ... I am not free ... So I feel the salary I get is not commensurate with the extra effort I put into my work".*

(Male Teacher : 11 years' experience)

*"All the extra studies at university have not helped".*

(Male Teacher : 13 years' experience)

*"There were twelve of us friends teaching in the Transvaal. Of the twelve, only two of us are still teaching. The other ten have gone into industry because the pay is much higher".*

(Male Teacher : 2 years' experience)

*"Especially now we teachers are not keeping on par with the private sector. One finds there that people with less training and education are earning so much more as compared to us. So obviously we complain. Everybody talks about us having the weekends off and so many holidays . I don't think that is the point. I think job satisfaction must go with a good salary".*

(Female Teacher : 14 years' experience)

*"The problem here is one of parity. Women feel they do the same amount of work as men, so why should they be paid less?"*

(Female Teacher : 8 years' experience)

**b) Findings related to Subgroups**

Significant relationships were found between the variables salary, perceived stress and the demographic characteristics of:

- i) age,
- ii) length of teaching experience and
- iii) rank.

**i) Younger vs Older Teachers**

Data relating to the teacher age subgroups are presented in Table 4.10

TABLE 4.10

AGE AND PERCEIVED STRESS ARISING FROM  
SALARIES OFFERED TO TEACHERS

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
20-24 years	0 (0)	22 (100%)	22
25-29 years	3 (2,8)	106 (97,2)	109
30-39 years	2 (2,3)	84 (97,7)	86
40+ years	7 (13)	47 (87)	54
T O T A L	12 (4,4%)	259 (95,6%)	271

$$\chi^2 = 11,94 \quad df = 3 \quad p < 0,01$$

Table 4.10 indicates that significantly more teachers in the 20-39-year age range (98-100%) compared to those in the 40 year+ age range (87%) perceive the issue of salary as a source of considerable stress.

A probable explanation for this situation may be that a large proportion of teachers in the 40 years+ age category (83,3%) are HOD's who have already achieved one promotion post and its accompanying monetary rewards. Besides, over half the number of Level 1 teachers and HOD's in the 40+ year age group (53%) augmented their salaries by obtaining postgraduate degrees. This may account for the somewhat lower frequency and intensity of stress among these teachers than among those in the other three age categories.

ii) Less Experienced vs More Experienced Teachers

As was the case with the variable of age, significantly more teachers in the 0-20 years experience range (96-100%) compared to those in the 21+ year experience category (82%), perceive the issue of salary as a source of considerable stress ( $\chi^2 = 18,28$ ;  $p < 0,01$ ). The probable reasons accounting for this discrepancy may be the same as those advanced earlier on when the age factor was discussed.

iii) Level 1 Teachers vs HOD's

Here again the results proved to be highly significant ( $\chi^2=12,39$ ;  $p < 0,01$ ). Significantly more Level 1 Teachers (97%) compared to HOD's (85%), perceive the issue of salary as being very stressful.

A probable reason for this difference is that the HOD's in the sample appear to be in a more favourable position salarywise since all of them have already attained one promotion post and have been rewarded financially. Also, many HOD's augmented their salaries further by improving their academic qualifications. According to the statistics for the present study, 26,7% of HOD's are graduates and 65% postgraduates.

By contrast, only 23% of Level 1 teachers in the sample have postgraduate degrees while a significant proportion (43,7%) are diplomates. A related point that emerged clearly from

the study is that many Level 1 teachers (34%) are presently engaged in part-time studies to improve their qualifications and thereby increase their salaries.

Some interesting statistics relating to teachers studying part-time have been obtained in the course of this research:

of the 132 Level 1 teachers and HOD's studying part-time, 36% were male and 38% female; 35% were married and 42% single; 35% have 0-3 years' teaching experience and 50% have 4-10 years' experience. These statistics serve to indicate which groups in particular have to carry the extra burden of part-time studies and the consequent stresses they generate.

Almost all female Level 1 teachers (98%) perceive the issue of salary to be moderately stressful (21%) or very stressful (76,5%). This is understandable when one considers that females, especially in the lower categories, are still being discriminated against, salarywise, on the basis of sex.<sup>1</sup>

## B. Time and Workload Pressures

### a) Overall Findings

Time pressures refer to the general level of school demands, both physical or mental, made on teachers within set time limits. The variety of demands made on the teacher in a typical schoolday, often with tight deadlines attached to

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1. 1. The matter of parity in salaries for Indian Level 1 female teachers has <sup>been</sup> receiving attention in 1992.



them, make this aspect of teaching a major area of stress (Blase, 1986; Dunham, 1984; Laughlin, 1984; Otto, 1986). Moreover, heavy workloads, in conjunction with inadequate time to complete them, create the classic pressure situation of attempting to do more work in less time.

In addition to regular classroom duties, preparation and marking, there are often extra demands which aggravate already existing time and workload stress. These include serving relief for absent teachers, carrying out non-teaching duties (e.g. playground duty, tuckshop duty, sports and other extra-curricular duties such as school functions), and attending to record-keeping and clerical work. As a result of these workload/time pressures, teachers may not be able to complete all the tasks required of them. Furthermore, teachers may not be able to achieve a desired level of performance in important aspects of their work and this could generate stressful feelings. According to Blase (1986:22-23), control of time is directly connected to an individual's perceptions of coping efficacy and is also related to problems of role conflict and overload.

The extent to which teachers encounter time and workload pressures and feel stressed by them is illustrated in Table 4.11. Results are shown for the subsamples by sex and rank, as well as for the total sample.

TABLE 4.11

TIME AND WORKLOAD PRESSURES AS A SOURCE OF TEACHER STRESS FOR TOTAL SAMPLE, SEX AND RANK (IN PERCENTAGES)

RANK	VARIABLE	NOT STRESSFUL					MOD. TO VERY STRESSFUL				
		MALE	FEMALE	TEACHER	HOD	TOT	MALE	FEMALE	TEACHER	HOD	TOT
	NUMBER =	180	180	300	60	360	180	180	300	60	360
5	Limited time available at school for preparation and marking	5,6	5,0	5,3	5,0	5,3	94,4	95,0	94,7	95,0	94,7
6	Record keeping and clerical work	4,4	1,7	3,0	3,3	3,0	95,6	98,3	97,0	96,7	97,0
8	Demands on your time by non-teaching activities	8,3	6,1	7,3	6,7	7,2	91,7	93,9	92,7	93,3	92,8
12	Serving relief for absent teachers	15,6	11,7	12,7	18,3	13,6	84,4	88,3	87,3	81,7	86,4
13	Time limits set for completing tasks	10,0	12,8	11,7	10,0	11,4	90,0	87,2	88,3	90,0	88,6

Table 4.11 shows that the majority of teachers reported at least moderate stress as a result of the above five stressors. A closer examination shows that all these are related to the issue of time. It is also worth noting from data given earlier (Table 4.4) that the first three stressors were ranked fifth, sixth and eight respectively in the list of 20 task- and situation-based stressors. This indicates that time issues are a major cause of teacher stress. These findings are consistent with those of overseas researchers such as DeFrank and Stroup (1989), Blase (1982; 1986), Galloway et al. (1985) and Otto (1986). In his analysis of work stressors the American school

system, Blase (1986:27), for instance, states that those factors which are perceived as very stressful by teachers are those which deprive them of time and interfere with instruction.

In similar vein record-keeping and clerical work emerged as a particularly important stressor in the present study. This is borne out by the fact that it was ranked sixth in the list of 20 stressors in the present study and that it emerged as the top stressor reported during the interviews. Of the thirty interviewees, 57% identified paperwork and preparation as being major contributors to the chronic strain and exhaustion which they experience. Comments such as the following were typical during the interviews:

*"Teachers are like glorified clerks .... a teacher is a professional and he should be allowed to operate within that parameter ... he knows what his priorities are. To ask us to put down on paper everything we do is an insult to our dignity and our professionalism. In addition we are asked to duplicate a lot of work ..."*

(Male Teacher : 10 years' experience)

*"Most teachers are teaching eight to nine periods a day with perhaps one free period. During this period you are expected to mark. Time is just not available to do other clerical work. So you try to find time from here, there and everywhere".*

(Female Teacher : 3 years' experience)

*"We need preparation, but not in as much detail as what is required ... After so many years of teaching you pick up certain techniques of teaching ... [it is] not necessary to rewrite the textbook".*

(Male Teacher : 7 years' experience)

b) Findings related to Subgroups

It is evident from the data given earlier in Tables 4.4 and 4.11, that sex, marital status, age, teaching experience, qualification and rank have minimal influence on teachers' perceptions of stress as measured by the five items given under "time and workload pressures."

C. Student-Related Pressures

a) Overall Findings

Numerous problems are encountered daily by teachers in their dealings with students. These include students who engage in disruptive behaviour; have personal and social problems;

require extra help with their work; show little or no interest in schoolwork; and show little appreciation for what teachers are doing for them.

The extent to which teachers in the sample felt stressed by student-related pressures is illustrated in Table 4.12

More than two-thirds of secondary teachers in the sample indicated that they experience moderate or high stress (Table 4.12) as a result of the five above-mentioned student-related problems.

TABLE 4.12

STUDENT-RELATED PRESSURES AS A SOURCE OF TEACHER STRESS  
FOR SEX SUBGROUP AND TOTAL SAMPLE (IN PERCENTAGES)

RANK	VARIABLE	NOT STRESSFUL			MOD. TO VERY STRESSFUL		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
	NUMBER =	180	180	360	180	180	360
7	Some parents' lack of interest in the progress/behaviour of their children	6,1	7,2	6,7	93,9	92,8	93,3
9	Some pupils' declining interest in schoolwork	5,0	5,6	5,3	95,0	94,4	94,7
10	Being accountable for pupils' performance	8,9	10,6	9,7	91,1	89,4	90,3
11	Teaching pupils of widely divergent abilities in the same class	6,7	8,3	7,5	93,3	91,7	92,5
17	Dealing with student discipline problems	27,2	29,4	28,3	72,8	70,6	71,7

It is worth noting that the first four stressors listed above were ranked seventh, ninth, tenth and eleventh respectively in the list of 20 task- and situation-based stressors. This suggests that responsibility/accountability for the educational outcome of students ranks high as a concern and source of stress among teachers. This gives support to the findings of Blase (1982; 1986), Coldicott (1985), and Milstein et al. (1984), that the major causes of teacher stress seem to be brought about by the teacher's desire to be effective and to achieve a good level of work with pupils.

Moreover, as pointed out earlier, many of the above-mentioned student-related stressors may interfere with teachers' valuable instructional time. This interference may be direct or indirect, requiring extra effort, time, and energy on the part of the teacher (Blase, 1986; 28-29). Dealing with student discipline problems, student apathy, and teaching pupils of divergent abilities in the same class are examples of direct interference, while parental lack of interest and non-support is an example of indirect interference. In respect of the former, researchers such as Blase (1986) and Goodlad (1984) state that teachers may view students who have learning problems or are unruly as obstacles, rather than challenges, to their professional goals.

There are many teachers who experience frustration due to their own inability to help students with learning needs and personal or social problems. In this respect constraints arising from time pressures, class size and teaching mixed ability groups prevent teachers from giving such pupils sufficient individual attention.

Interestingly, the data indicate that dealing with student discipline problems is not one of the prime sources of teacher stress. Only 25% of teachers indicated that they perceived this to be "very stressful". Furthermore, this stressor was ranked seventeenth in the list of twenty stressors (Table 4.4). This is in contrast to the findings of Dunham (1981; 1984), Turk, Meeks and Turk (1982), Otto (1986), and Lortie (1975), but consistent with the findings of Kyriacou (1987; 1989), Kyriacou and Sutcliffe (1977), Farber (1984) and Litt and Turk (1985). Kyriacou (1987:148; 1989:31) points out that it is a pupil's poor attitude towards school and his/her lack of motivation which have generally been found to be the main sources of teacher stress and not pupil indiscipline *per se*. While pupil discipline problems can be dealt with competently by most teachers most of the time without undue stress, the problem of poorly motivated pupils is a more prevalent problem and is difficult to handle.

The following excerpts give us some insight into some of the problems teachers face in respect of student-related factors:

*"As teachers we cannot do everything for the child. We expect that when the child gets home, the parent will take over from there. However, because in most cases both parents are working, parents cannot fulfil their duties towards their children adequately. So it becomes stressful for the teacher who has to do much more in the classroom because he does not get that co-operation from the parents".*

*(Female Teacher : 8 years' experience)*

*"A teacher is motivated by his charges. If I see a group of pupils being enthusiastic and responding, this immediately uplifts me and I begin to work that much harder. When I see apathy indifference in front of me, somehow I seem to get into that mode. It takes a conscious effort on my part to remove myself from their kind of attitude".*

*(Male Teacher : 10 years' experience)*

*"In our schools the interest of pupils is declining very rapidly ... Many pupils don't seem to care any more about schoolwork. I don't know whether this has something to do with peer group influence".*

*(Male Teacher : 11 years' experience)*



*"I feel it is unfair to hold teachers accountable for pupils' performance. If you are teaching a class of pupils who are generally weak, you may do your best and get the class to pass, but you may not be able to produce A's. This does not mean that you are a bad teacher compared to another teacher who may have a group of pupils who are generally bright".*

*(Female Teacher : 7 years' experience)*

*"Not only does a teacher have to worry about children with divergent abilities, but about grades as well. With the syllabus being different and with different types of pupils in the same class, the teacher is caught in the midst of it all. He does not know how far he can go - whether to worry about the examinations, or to complete the syllabus and also satisfy the other requirements laid down by the school and Department. All this adds to stress".*

*(Female Teacher : 14 years' experience)*

*"It is difficult to teach Higher Grade and Standard Grade English in one class. For example, when I give the class a comprehension test, I cannot find the time to do remedial work for both grades. After all, I have only one period per week for Comprehension".*

*(Male Teacher : 10 years' experience)*

*"They say teaching is a partnership between the teacher, the pupil and the parents, but this is not so... With all the other distractions facing pupils nowadays and with both parents working, the teacher is working alone most of the time ... and he is held accountable for the results".*

(Female Teacher : 13 years' experience)

*"In our school we have children coming from a low socio-economic background. It is very difficult for teachers to get pupils to do the work and to come to school regularly. It is difficult to discipline them as some pupils are very arrogant. As a result we get demotivated".*

(Female Teacher : 8 years' experience)

b) Findings related to Subgroups

Contrary to expectations, the  $\chi^2$  values for each of the five student-related stressors for male and female teachers was not significant. In fact, as is evident in Table 4.12, women teachers perceived dealing with student discipline problems, as well as the other four student-related problems, to be less stressful than their male colleagues did, but the difference in each case was not great. This is contrary to the findings of Houghton et al. (1988) and Laughlin (1984).

The variable of qualification proved to be an important moderator of teachers' perceptions in respect of their being held accountable for pupils' performance, while the factors of age and teaching experience played a significant role in mediating teacher's perceptions of student-discipline problems. The findings relating to these two aspects are particularly interesting and have therefore been singled out for closer examination below :

i) Accountability for Pupils' Performance : Teaching qualification as biographical mediator

In recent years the concept of educational accountability has been increasingly applied in public schools. However, applying the concept to teachers and holding them accountable for educational outcomes raises issues of special concern to teachers because learning outcomes are largely the result of factors over which schools and teachers have little or no control (Darling-Hammond, 1989:59; Phillips & Lee, 1980:99).

Factors such as family background, social class, geographic region, ethnicity and race have contributed to the variance in school achievement and learning outcomes. Moreover, school populations have not been randomly distributed according to these factors. Some schools may have concentrations of students who more readily accept school learning. Other schools may have concentrations of students with social and educational handicaps that hamper school

learning. In such cases the problems and stress created by accountability add to a teacher's stress level (Phillips & Lee, 1980:99-100).

An analysis of the data shows that a teacher's qualifications have an important influence on his/her perception of stress arising out of accountability for pupils' performance. The data obtained in this study are presented below.

TABLE 4.13

TEACHERS' QUALIFICATIONS AND PERCEIVED STRESS LEVELS  
ARISING OUT OF ACCOUNTABILITY FOR PUPILS' PERFORMANCE

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
Diplomates	10 (10,2)	88 (89,8)	98
Graduates	7 (8,6)	74 (91,4)	81
Post Graduates	18 (24,7)	55 (75,3)	73
T O T A L	35 (13,9%)	217 (86,1%)	252

$$\chi^2 = 10,06$$

$$df = 2$$

$$p < 0,01$$

Table 4.13 shows that there is a significant difference in the way teachers with differential qualifications view this issue. Diplomates and graduates (90-91%) seem to perceive being held accountable for pupils' performance to be more stressful than postgraduates (75%). This may be due to various factors. With only a basic qualification, many diplomates may not feel well equipped to teach their subject

with confidence. As a result they may seek to improve their academic knowledge by studying part-time to become graduates. Evidence of this is the fact that 53% of diplomates in the present study are engaged in part-time studies. The extra demands made on them may account for their higher frequency and intensity of stress.

Stress may be a trifle higher among graduate teachers (91%) because many of them are teaching senior classes. These classes include matriculants. As a result, the reputation of these teachers is at stake since their results, externally controlled, will be closely scrutinised. Graduates may therefore feel greater accountability to parents, educational authorities and themselves and this may result in their experiencing higher degrees of stress.

Postgraduates, by contrast, feel less stressed (75%) than the other two groups because they may generally be more confident of their teaching skills and abilities by virtue of their greater experience and higher qualifications. Moreover, many of them may have developed a repertoire of coping skills during their teaching career in order to deal successfully with the demands of teaching. Many HOD's (65%) also feature in this category. Another possible factor to consider is that many of the older HOD's may have relinquished matric teaching to younger, more promotion-oriented graduate teachers, thereby decreasing their accountability and stress.

ii) Student-discipline problems : Age and teaching experience as significant demographic variables

Results relating to the teacher-age subgroups were found to be highly significant ( $\chi^2 = 18,91$ ;  $p < 0,01$ ). Younger teachers in the 20-29 year age range, particularly beginning teachers aged 20-24 years (71%), reported more stress from student discipline problems than older teachers in the 30+ year age group (29 - 39%). This finding is consistent with those of, inter alia, Coates and Thoresen (1976), Kyriacou & Sutcliffe (1978b), Veenman (1984), and Reeves and Kazelkis (1985), and may be explained by the fact that pupil management skills develop over time. Studies by these researchers have revealed that the younger (and less experienced) teachers' anxieties are related to being able to teach effectively, maintaining class control and discipline, motivating pupils and maintaining their interest. Because they do not have the skills, the experience or the maturity to handle all these aspects together, they encounter difficulties and so experience stress. Older teachers, by contrast, have had ample experience and opportunity to master all these aspects; hence they seem to experience and report less stress.

The results in terms of teaching experience were similar to those for age ( $\chi^2 = 17,18$ ;  $p < 0,01$ ). A significant proportion of less experienced teachers in the 0-10 year range (55-69%), particularly beginning teachers with 0-3 years experience (69%), reported greater stress from student

discipline problems than those who had 11 or more years of experience (26-39%). The reasons given earlier for the differing perceptions of younger and older teachers in respect of dealing with student discipline problems may hold true for teaching experience as well in view of the fact that age and teaching experience appear to be linked.

D. Organizational Structure and Climate

D1 Insufficient opportunity for participation in Decision-making (PDM)

One of the most noticeable changes that has taken place in society over the past two decades has been a move towards greater democratization in different areas of our lives, including our work lives. In industry the demand by employees for consultation and participation in decision-making processes has been growing for some time, and it is evident that there is a demand for a similar kind of involvement from teachers within our schools.

Various studies have focused on the beneficial effects of PDM. French and Caplan (1970), for example, found that greater opportunities for PDM among professional workers and managers led to higher productivity, improved performance, lower staff turnover and lower levels of physical and mental illness. Jackson (1983:3-9) found that PDM is an important strategy for reducing the job-related strains of role conflict and ambiguity. This, in turn, had indirect effects

such as increasing communication, understanding and social support among co-workers, better performance, greater job satisfaction, increased commitment to the job, and a reduction in intention to leave the organization (Bacharach, Bauer & Shedd, 1986:249; Conley, Schmidle & Shedd, 1988:259-276).

On the other hand, a highly centralized decision-making system may breed suspicion, contempt, and a general dissatisfaction with work. Particularly in organizations employing professionals or highly skilled individuals, the powerlessness and lack of control over the work environment can result in low morale and a collapse of the generally innovative spirit that professionals bring with them to their jobs. Such dissatisfaction can have a devastating impact on the overall quality and effectiveness of the organisation's performance (Bacharach, Bauer & Shedd, 1986:249)

a) Overall Findings

In the present study 85% of teachers in the total sample perceived insufficient opportunities available to them for PDM as a source of moderate or considerable stress.

b) Findings related to Subgroups

The data in the present study suggest that biographical variables have a significant influence on teacher's



perceptions of stress related to the factor "not being given sufficient opportunity for participation in decision-making processes". Highly significant differences at the  $p < 0.01$  level were found in the case of four of the six demographic subgroups, i.e. sex, age, teaching experience, and rank. The findings in respect of each of these will be treated separately.

i) Male vs Female Teachers

Significantly more females (82,4% vs 65%) reported greater stress as a result of a lack of access to decision-making processes. Conversely, more men perceived this issue to be "not stressful" ( $\chi^2 = 7,91$ ;  $p < 0,01$ ).

During the interviews it became clear that women teachers generally perceived themselves as being discriminated against in PDM processes by the predominantly male management team in secondary schools. The statistics in the present study show that the ratio of Male HOD's to Female HOD's is 5:1.

A similar finding in respect of PDM was made by Laughlin in his research study. He suggests that this difference in perceptions between the sexes may reflect "female reaction to generally male - dominated school executives" (1984:18).

ii) Younger vs Older Teachers

The data indicate that teachers in the age categories 20-24, 25-29 and 30-39 years appear to perceive denial of sufficient opportunity for PDM to be more stressful (73%-82% vs 54%) than teachers in the 40+ years category ( $\chi^2 = 11,35$ ;  $p < 0,01$ ). Overall, teachers in the 30-39 year category and below comprised mainly Level I teachers, many of whose views may not be congruent with those of the school management personnel. As a result they may not be consulted in decision-making or their decisions may not be respected.

On the other hand, teachers in the 40+ age category comprise chiefly senior teachers and HOD's whose views may be more congruent with those of Upper Management. As a result, their opinions are often sought, thereby lowering their stress levels markedly.

iii) Less Experienced vs More Experienced Teachers

Data relating to the length of teaching experience and perceived stress are presented in Table 4.14.

Table 4.14 suggests that teachers in the 0-3, 4-10 and 11-20-year experience categories perceive denial of sufficient opportunity for PDM as a source of stress more often than the older, more experienced teachers with more than 21 years of teaching experience (72%-81% vs 45,5%). In this respect what has been said for age appears to hold true

for teaching experience as well. Thus, stress appears to diminish with age (maturity) and length of teaching experience.

TABLE 4.14

LENGTH OF TEACHING EXPERIENCE AND PERCEIVED STRESS ARISING  
FROM INSUFFICIENT OPPORTUNITY FOR PARTICIPATION  
IN DECISION-MAKING

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
0-3 years	5 (19,2)	21 (80,8)	26
4-10 years	19 (20,4)	74 (79,6)	93
11-20 years	18 (28,1)	46 (71,9)	64
21+ years	12 (54,5)	10 (45,5)	22
T O T A L	54 (26,3%)	151 (73,7%)	205

$$x^2 = 11,48 \quad df = 3 \quad p < 0,01$$

iv) Level 1 Teachers vs Heads of Departments

Results reveal that the majority of Level 1 teachers (80,5%) perceive denial of sufficient opportunity for PDM as being "very stressful". In contrast, the majority of HOD's (64,5%) do not perceive this factor as cause for stress ( $x^2 = 27,43$ ;  $p < 0,01$ ).

Interestingly, a large proportion of the 80,5% Level 1 teachers who perceive this issue to be very stressful comprises Level 1 female teachers (60%). This finding seems

to reinforce the earlier finding that Level 1 female teachers perceive the lack of access to PDM processes to be a source of considerable stress.

Generally speaking, the key factor boils down to the *opportunities* given to teachers in the different ranks to participate in decision-making. As members of the Management Committee at school, HOD's are often consulted before the rest of the staff on decisions to be taken. As a result they are given ample opportunity to make their contributions. Moreover, Upper Management tends to look towards the more senior teachers for their opinions. The probable reasons for this could be their greater experience within the profession as well as the fact that their views are often more congruent with, and therefore less in opposition to those of Upper Management.

It must also be noted that a significant proportion of all Level 1 teachers in the present study (70%) consists of teachers with 0-10 years' teaching experience. Because of their relatively limited experience such teachers may be considered by Upper Management as being less ready for making meaningful contributions in the decision-making process. Consequently Upper Management may neglect consulting with them. The interviews indicated that younger teachers often resent being left out of the decision-making process and feel frustrated when decisions are imposed on them from without. This, presumably, adds to their feelings of stress.

## D2      Teaching Facilities and Resources

### a)      Overall Findings

In order to be effective teachers must be provided with the facilities and resources necessary to carry out their assigned responsibilities. No matter how motivated or competent teachers may be, inadequate facilities and resources will not only prevent them from accomplishing their responsibilities efficiently, but may also tax their adaptive resources possibly resulting in dissatisfaction, lower tolerance, frustration and demotivation (Bacharach, Bauer & Shedd, 1986:244; Lortie, 1975:182; Phillips & Lee, 1980:99).

Poor school environmental conditions may include such problems as inadequate buildings; lack of general classroom, storage and activity space; inadequate instructional materials, equipment and supplies; and insufficient insulation against noise.

In this study the vast majority of teachers perceived the teaching facilities and resources available to them at their schools as being "moderately stressful" (50%) or "very stressful" (31%). Only 19% indicated that this factor was "not stressful". This stressor was ranked sixteenth in the list of twenty stressors (Table 4.3).

b) Findings Related to Subgroups

Age was the only variable that was significantly related to teachers' perceptions of stress in respect of available teaching facilities and resources available (Table 4.15).

TABLE 4.15

AGE AND PERCEIVED STRESS ARISING FROM  
INADEQUATE TEACHING FACILITIES AND RESOURCES

SUBGROUPS	NOT STRESSFUL	VERY STRESSFUL	COMBINED
20-24 years	9 (50,0)	9 (50,0)	18
25-29 years	26 (41,9)	36 (58,1)	62
30-39 years	15 (24,2)	47 (75,8)	62
40+ years	18 (47,4)	20 (52,6)	38
T O T A L	68 (37,8%)	112 (62,2%)	180

$$\chi^2 = 7,95$$

$$df = 3$$

$$p < 0,05$$

Teachers in all age categories appear to be divided over this issue. Teachers in the age category 30-39 years, for instance, appear to perceive the teaching facilities and resources available at their schools to be inadequate and therefore a cause of stress to a greater extent than do teachers in the 20-24, 25-29 and 40+ years age categories. It is worth noting that 91,5% of teachers in the 30-39 year age range in the sample are Level 1 teachers. Such teachers may see themselves as seasoned, experienced teachers worthy of adequate working conditions and resources. The

interviews indicated that many of these promotion-seeking teachers become frustrated when their efforts in the classroom are thwarted by the limited amount and poor quality of the available equipment and materials.

### D3 Opinion held by others of the Teaching profession

#### a) Overall findings

Although this factor is ranked fifteenth in the list of twenty stressors, it has a relatively high weighted mean of 2,23 (see Table 4.3), indicating that it is an important source of stress to teachers.

Table 4.16 gives some indication of the extent to which stress levels, and presumably morale, among teachers are affected as a result of negative opinions and attitudes held by others of the teaching profession.

TABLE 4.16

#### NEGATIVE OPINIONS OF THE TEACHING PROFESSION AND PERCEIVED STRESS

NOT STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	TOTAL N
67 (18,6%)	142 (39,4%)	151 (41,9%)	360

It is evident that the majority of secondary teachers (81,4%) feel stressed by negative opinions others have of their profession. This, the interviews indicated, often leads to a lowering of morale among teachers. Coverdale (1973:30-38) views low morale as a contributory factor to stress, and suggests that the root cause lies mainly outside the schools and has to do with the kind of educational system envisaged and how it is resourced.

The rapid and profound changes taking place in society have resulted in many new problems facing today's teachers. Not only has their role changed, but the expectations, support and judgement of the social context within which they work have also changed. Generally, there appears to be a lack of support and appreciation for teachers' work from the wider community. Interviewees mentioned the recent adverse publicity in the media relating to issues such as teacher absenteeism and child abuse, for example, as also contributing towards tarnishing the image of the teaching profession.

Circumstances such as these may well have a negative impact on a teacher's self-image, motivation, involvement and the amount of effort he/she is willing to put into the job (Esteve, 1989:7; Trendall, 1989:54).

b) Findings related to Subgroups

$\chi^2$  tests applied to the data (Table 4.4) showed that none



of the six demographic characteristics had a significant influence on teachers' perceptions of stress in relation to the factor "Opinion held by others of the teaching profession". All six demographic subsamples appeared to view this issue in a similar manner.

## E        Interpersonal Relationships

### a)        Overall Findings

The nature and extent of relationships at work is directly related to perceived levels of stress. Good relationships at work act as a "buffer" against stress. They tend to enhance feelings of self-esteem and to reduce feelings of isolation amongst teachers (Dworkin et al., 1990; Otto, 1986:124-125; Trendall, 1989:53-54).

Interestingly, the present study indicates that interpersonal factors featured lowest as sources of stress when compared to the other seventeen task- and situation-based stressors (Table 4.3). This finding is supported by the findings of researchers such as Farber (1984), Freeman (1986) and Trendall (1989) that teachers seem to derive more satisfaction (and presumably less stress) in the interpersonal realm, i.e. in their interactions with colleagues and pupils.

The extent to which the sample felt stressed by various interpersonal relationships as well as the weighted mean values for each item are presented in Table 4.17.

Overall, Table 4.17 shows that there is a gradual decrease in the extent and intensity of stress experienced according to hierarchical position, with Level 1 teachers and HOD's experiencing most stress in their interactions with Principals, and least stress in their interactions with other members of staff. There is also a corresponding decrease in mean values.

**TABLE 4.17**  
**PERCEIVED STRESS ARISING FROM INTERPERSONAL FACTORS:**  
**DISTRIBUTION OF RESPONSES AND MEANS FOR THE TOTAL SAMPLE**  
**(N = 360)**

I T E M	NOT STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	MEAN <sup>*</sup>
Attitude of the Principal towards you	168(46,7%)	140(38,9%)	52(14,4%)	1,68
Relating to your Head of Department/immediate superior	232(64,4%)	99(27,5%)	29(8,0%)	1,44
Attitudes of other members of staff towards you	288(80,0%)	67(18,6%)	5(1,4%)	1,21

\* Values range on a rating scale from 1(not stressful) to 3(very stressful)

A further analysis of the data indicates that HOD's as a group perceive interpersonal relationships as being more stressful than Level 1 teachers although the differences are not significant. This becomes clear when the statistics in respect of each of the above three interpersonal items is analysed.

While more than half the number of Level 1 Teachers and HOD's combined (53,3% in Table 4.17) found that the attitude of the Principal towards them was at least moderately stressful, more HOD's than Level 1 teachers indicated this (55% vs 53%). Again, 35,6% of Level 1 teachers and HOD's (Table 4.17) found relating to their immediate superiors to be at least moderately stressful. A further analysis of this result showed that 32% of Level 1 teachers found interacting with their HOD's to be moderately stressful, while 53% of HOD's found this to be the case in their interactions with their Deputy Principals.

Finally, although only 20% of Level 1 teachers and HOD's combined perceived the attitudes of other members of staff to be least moderately stressful, more HOD's than Level 1 teachers found this to be the case (31,7% vs 17,7%).

b) Findings related to Subgroups

As was expected,  $\chi^2$  tests applied to the data showed that

the six variables sex, marital status, age, teaching experience, qualification and rank had minimal influence on teachers' perceptions of the stressfulness of each of the interpersonal factors.

#### 4. ROLE-RELATED SITUATIONS AND STRESS AMONG SECONDARY SCHOOL TEACHERS

Individuals who work in institutional settings such as schools are often faced with stresses that are endemic to organizational structures (Farber, 1983:5). The most notable among these are role conflict, role ambiguity and role overload. This is because schools are social systems which contain a wide range of social positions (role-sets) and role-standardizing forces requiring integration and co-ordination.

Evidence from previous research generally indicates that occupational role stress can result in dysfunctional individual and organizational consequences. The results of several studies have related discrepancies in role expectations to lower levels of organizational effectiveness. As specific forms of role stress, role conflict, role ambiguity and role overload have been shown to be associated with lower job satisfaction and performance, lower organizational commitment, poor interpersonal relationships, a propensity to leave the

organization, and a high degree of job-related tension (Bedeian et al., 1981; Litt & Turk, 1985; Schwab & Iwanicki, 1982).

Other research, however, suggests the possibility that organizational level may serve to moderate the relationship between either role ambiguity or role conflict and job stress and satisfaction. Kahn et al. (1964) and Hammer & Tosi (1974), for example, suggest that role conflict will be more stressful and dissatisfying than role ambiguity for employees in the lower level positions of an organization because they lack autonomy and are more highly dependent on their supervisor/s. Conversely, these investigators suggest that role ambiguity will be more stressful and dissatisfying than role conflict for employees at the higher levels of an organization because they have less influence over the sources of role ambiguity.

On the basis of the above evidence it was hypothesised that in the present study role conflict, role ambiguity and role overload would be positively related to work-induced stress among the teachers surveyed. It was further hypothesised that rank would be a significant moderator of role stress.

#### 4.1 Overall Findings Related to Role-Related Situations

In the present study role conflict, role ambiguity and role overload were measured by using three items relating to each variable. Each subscale was scored using a three-point

response mode labelled "No", "Not Sure" and "Yes" and by averaging across the relevant items. The scoring for each item/subscale was reversed so that the greater the score, the greater was the perceived stress (Bedeian et al., 1981 : 253).

The rank orders and means for the nine role-related items for the entire sample as well as for the teacher rank subgroups are presented in Table 4.18.

As is evident from Table 4.18, the present sample of secondary teachers reported most stress arising, in rank order, from the following role-related situations :-

1. the amount of work adversely affecting the quality of the work produced (i.e. qualitative role overload;  $\bar{X} = 2,60$ )
2. being compelled to perform duties that appear to have little value (i.e. role conflict;  $\bar{X} = 2,59$ )
3. having too heavy a workload (i.e. quantitative role overload;  $\bar{X} = 2,52$ ), and
4. not being sure about how superiors evaluate teaching (i.e. role ambiguity;  $\bar{X} = 2,50$ ).

TABLE 4.18

RANK ORDERS AND MEANS FOR ROLE STRESS FOR THE TOTAL  
SAMPLE AND TEACHER RANK SUBGROUPS

ITEM NO.	ITEM	TOTAL SAMPLE		LEVEL 1 TEACHERS		HOD'S	
		RANK	MEAN <sup>**</sup>	RANK	MEAN <sup>**</sup>	RANK	MEAN <sup>**</sup>
	<u>ROLE CONFLICT</u>						
11.1	My job interferes overly with my home life	5	2,44	5	2,47	4	2,30
11.4	I am not able to satisfy conflicting demands of superiors, colleagues, pupils and parents	7	2,23	7	2,24	6	2,15
11.7	I am compelled to perform duties that appear to have little value	2	2,59	1	2,64	3	2,35
	$\bar{X}$ FOR ROLE CONFLICT		2,42		2,45		2,27
	<u>ROLE AMBIGUITY</u>						
11.2	I have to "feel my way" in performing my duties because directives or instructions are vague	9	1,70	9	1,70	9	1,68
11.5	I do not feel sure about the manner in which my superiors evaluate my teaching	4	2,50	3	2,55	5	2,22
11.8	I am given too little authority to carry out my responsibilities in the manner I see fit	6	2,35	6	2,42	7	1,97
	$\bar{X}$ FOR ROLE AMBIGUITY		2,18		2,22		1,96
	<u>ROLE OVERLOAD</u>						
11.3	I feel I have too heavy a workload	3	2,52	4	2,53	2	2,50
11.6	The amount of work I have to do adversely affects the quality	1	2,61	2	2,60	1	2,62
11.9	I am given many duties for which I have not been adequately trained	8	2,13	8	2,19	8	1,85
	$\bar{X}$ FOR ROLE OVERLOAD		2,42		2,44		2,32
	NUMBER =		360		300		60

<sup>\*\*</sup>Values range on a rating scale from 1(No) to 3(Yes)

The fact that these four role-related stressors were ranked highest supports the findings relating to task-and situation-based sources of stress, viz. that teachers' concerns generally seem to revolve around the desire to be effective and to produce a good level of work with their students. Any factor which obstructs or hinders teachers from realizing these aims, therefore, becomes a source of intense frustration and stress.

The teachers in this sample reported least occupational stress on Item 11.2, i.e. not being able to get needed information because directives or instructions are vague (i.e. role ambiguity;  $\bar{X}=1,70$ ). However, cognisance must be taken of the fact that almost a quarter of the sample (24%) responded "Not Sure" to this item. This uncertainty on the part of teachers may contribute to stress.

Further computations of the data indicate that both role conflict and role overload were major sources of role stress for the sample, each having equivalent subscale mean values of 2,42. The subscale score for role ambiguity was somewhat lower, with a  $\bar{X}$  value of 2,18.

#### 4.2 OVERALL FINDINGS RELATED TO SUBGROUPS

Table 4.19 shows that intra-group comparisons of the data revealed no variance among the six subgroups in respect of perceived stress for five role-related factors (Items 11.1, 11.2, 11.3, 11.4 and 11.6). This suggests that biographic



characteristics may have had very little influence on teachers' experience of role-stress in respect of these five factors in the present study.

TABLE 4.19

SUMMARY OF SIGNIFICANT RESULTS OBTAINED FROM  $\chi^2$  - ANALYSES  
OF ROLE-RELATED STRESSORS FOR THE SIX DEMOGRAPHIC SUBGROUPS

ITEM NO	ITEM	SEX	MARITAL STATUS	AGE	TCH. EXP.	QUAL	RANK
	ROLE CONFLICT						
11.1	My job interferes overly with my home life						
11.4	I am not able to satisfy conflicting demands of superiors colleagues, pupils and parents						
11.7	I am compelled to perform duties that appear to have little value			** 12,69	** 15,25		* 5,30
	ROLE AMBIGUITY						
11.2	Directives or instructions are vague						
11.5	I am not sure how my superiors evaluate my teaching						** 10,15
11.8	I am given too little authority to carry out my responsibilities in the manner I see fit			** 11,68	** 12,45		** 15,81
	ROLE OVERLOAD						
11.3	I have too heavy a workload						
11.6	The amount of work I have to do adversely affects the quality						
11.9	I am given many duties for which I have not been adequately trained	* 4,44			* 10,65		** 6,95

\*  $p < 0,05$

\*\*  $P < 0,01$

There were ten instances of significant differences (seven at the  $p < 0,01$  level and three at the  $p < 0,05$  level) in respect of the remaining four role-related factors. These were related to sex, age, teaching experience and rank. Marital status and qualification did not emerge as significant moderators of role-related occupational stress in this study.

The results in respect of the role conflict, ambiguity and overload subscales will each be dealt with in greater detail.

#### A      Role Conflict

Role conflict may be defined as the degree of perceived conflict between expected role behaviours. It occurs when inconsistent, incompatible, or inappropriate demands are placed upon an individual (Capel, 1989:37, Farber, 1983:6).

The teacher's role may be regarded as a prime conflict situation and an important potential source of stress. *Intra-role* conflicts among teachers are caused by contradictory expectations from supervisors, colleagues, pupils and parents. *Inter-role* conflict is due to teachers having to assume several roles within the school setting, for example, between teacher as instructor/ controller and teacher as parent/friend/welfare officer. (Dunham, 1976, 1984; Sparks, 1979; Tosi & Tosi, 1970).

Role conflict also includes teachers having to do things against their better judgement (Dunham, 1980), or their having to do things that they perceive to be outside the domain of professional work, e.g. administrative duties or paperwork (Farber, 1984), or being forced to teach outside their speciality in areas for which they have no desire or skill (Schwab & Iwanicki, 1982), or spending time on maintaining discipline rather than actual teaching (Blase,

1982). Role conflict may also occur when a teacher's values and ethics conflict with those of his/her supervisor.

Characteristics of school systems as organizations also determine role conflict and stress, for example, the professional's emphasis on autonomy and quality of service may clash with bureaucratic requirements stressing supervision, routine and uniformity (Phillips & Lee, 1980).

Role conflict is increased when psychological processes, such as a belief system which emphasizes perfectionism and compulsive behaviour, results in compulsive worrying and anticipation of stress if expectations are not met (Moracco et al., 1981). According to Woods (1989:95) probationary and inexperienced teachers are most at risk of succumbing to stress because they have not yet learned how to cope with the dilemmas and contradictions of their job.

a) Overall Findings

Table 4.20 indicates the extent to which teachers in the sample perceived role conflict factors to be a source of occupational stress.

It is evident from Table 4.20 that for the majority of teachers (73%) the most important source of role conflict was being compelled to perform duties that, in their judgement, appeared to have little value. Only 14%

disagreed with this statement. However, this factor was ranked second overall; first, by Level 1 teachers; and third, by HOD's (Table 4.18). These findings indicate that this is a major source of stress to teachers.

TABLE 4.20

ROLE CONFLICT FACTORS AND PERCEIVED STRESS

RANK ORDER	ITEM	NO	NOT SURE	YES
2	Am compelled to perform duties that appear to have little value	51 (14,2%)	46 (12,8%)	263 (73,0%)
5	My job interferees overly with my home life	82 (22,8%)	38 (10,5%)	240 (67,0%)
7	Not able to satisfy conflicting demands made by supervisors, colleagues, pupils and parents	93 (25,8%)	94 (26,1%)	173 (48,0%)

However, when the sample of interviewees were asked to give examples of specific stressors in the school situation, they were able to mention only a few. As the interviews were held after the mid-year examinations, examples in respect of examinations appeared to be uppermost in teachers' minds. These included duplication of work, for example, filling in both progress cards and report forms after examinations, filling in unnecessary details on report forms such as the age of pupil and average age of standard. As one teacher commented: *"Surely the parent knows his child's age"*.

$\chi^2$  tests revealed significant differences in respect of teachers' perceptions of the factor "I am compelled to perform duties that appear to have little value". These differences related to age, teaching experience and rank. These findings will be discussed in greater detail.

Work-related demands and duties seem to make it difficult for many teachers to find enough time and energy to rest and relax at home. Two-thirds of the teachers surveyed (67%) agree with the statement "My job interferes overly with my home life" (Table 4.20). This stressor was also ranked fifth (Table 4.18). Further analyses of the data showed no significant differences among the six demographic subgroups. All these factors indicate that this is an important source of occupational stress to teachers.

The following comments made during the interviews are representative of teachers' feelings on this issue:

*"If you are not told in advance that you are going on duty (after school), this puts a lot of pressure on you because it means your family will not have their meals on time... Then there are Saturday activities and taking work home. There is a conflict between your family needs and your school duties".*

(Married Female: 8 years' teaching experience)

*"If you were to work in another job, you would have to work from eight to five and not do any work at home. Most of a teacher's time after school is taken up preparing for the next day, instead of spending time with his family".*

(Married Male: 6 years' teaching experience)

The sample appeared to be divided in its response to the role stressor "I feel I am not able to satisfy the conflicting demands made by superiors, colleagues, pupils and parents" (Table 4.20). Less than half the sample (48%) agreed with this statement while 26% disagreed and 26% were "not sure". As stated earlier, this uncertainty among teachers may be a source of stress itself. Again, no significant differences were found among the six demographic subsamples. This suggests that teachers generally appear to perceive this issue in a similar way.

b) Findings Related to Subgroups

i) Teaching experience, Age and Perceived Role Conflict arising from compulsion to perform duties that appear to have little value

Data relating to the teaching experience categories are presented in Fig 4.1 below.

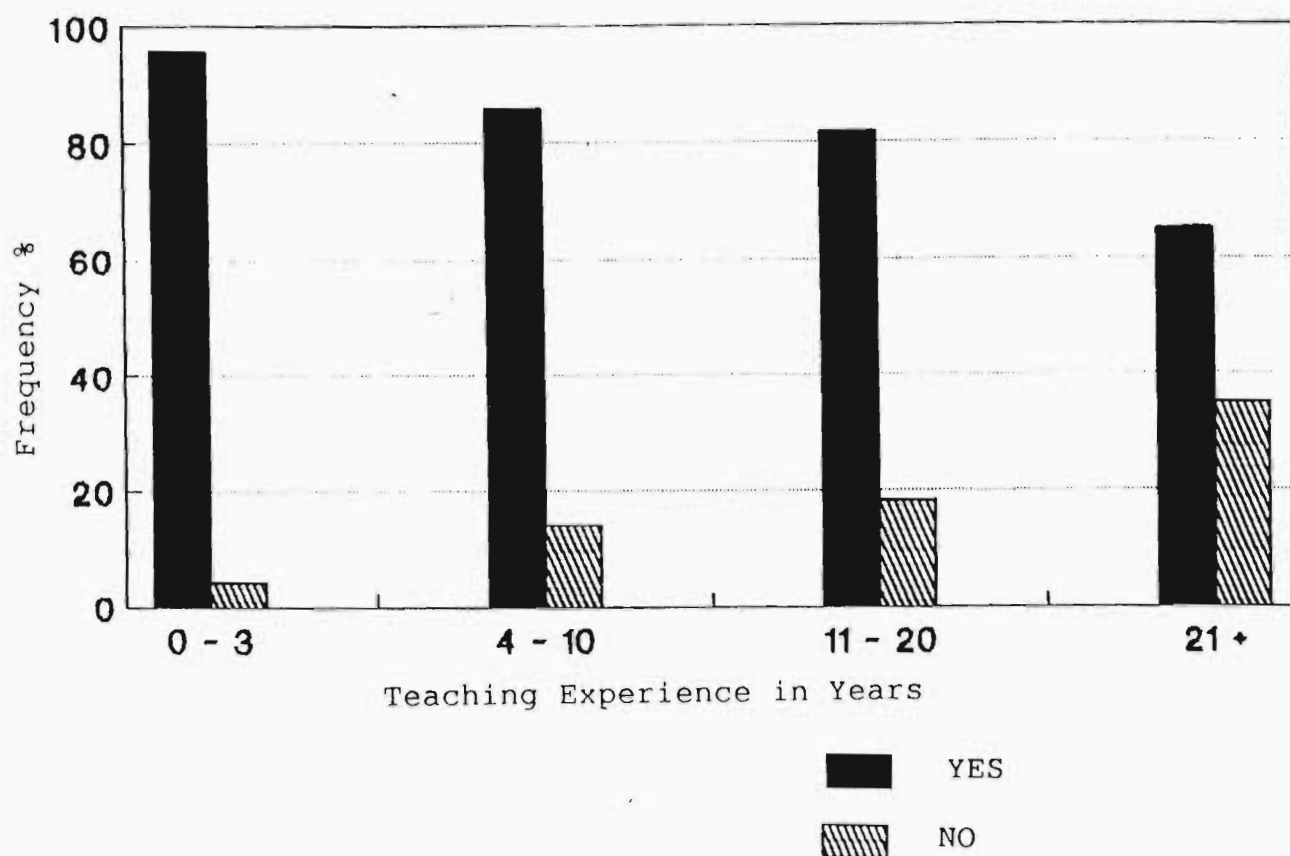


Fig. 4.1 : THE PERCEIVED STRESS LEVELS ARISING FROM COMPULSION TO PERFORM DUTIES THAT APPEAR TO HAVE LITTLE VALUE : DATA RELATING TO TEACHERS IN THE FOUR TEACHING EXPERIENCE CATEGORIES.

Fig. 4.1 shows that while the majority of teachers in all four teaching experience categories agree with the above statement, there is a proportionate decrease, percentagewise, in terms of teaching experience. Significantly more teachers in the 0-3, 4-10 and 11-20 years' experience categories (82-96%) than older, more experienced teachers (65%) with 21+ years experience responded "Yes". A probable explanation is that the older group of teachers, 83% of whom comprise HOD's, are not so burdened with administrative/clerical work related to classroom teaching and other non-teaching duties as are

other teachers. The latter may also be experiencing difficulty in coming to terms with the excessive amount of paperwork involved.

A similar situation exists in respect of age ( $\chi^2 = 12,69$ ;  $p < 0,01$ ). Again, although the majority of teachers in all four age groups responded "Yes" to the statement, a significant disparity apparently exists between the perceptions of teachers in the 20-24, 25-29 and 30-39 year groups (85 - 100%) and the older teachers in the 40+ years group (71%). The probable reasons that have been advanced for teaching experience may hold true for age as well.

ii) Rank and Perceived Role Conflict arising from Compulsion to perform duties that appear to have little value

In the light of the findings reported above relating to age and teaching experience, it seemed reasonable to assume that significantly more Level 1 teachers than HOD's would indicate that they are compelled to perform duties that, in their judgement, appear to have little value. This assumption was confirmed as indicated in Table 4.21.

While the majority of teachers of both ranks responded "Yes" to the statement, significantly more Level 1 teachers (86%) than HOD's (72%) indicated this. The probable explanations for this may be the same as those given for age and teaching



experience. The data suggest that it is the younger, less experienced Level 1 teachers who appear to perceive this issue to be particularly irksome.

TABLE 4.21

RANK AND PERCEIVED ROLE CONFLICT ARISING FROM COMPULSION  
TO PERFORM DUTIES THAT APPEAR TO HAVE LITTLE VALUE

SUBGROUPS	YES	NO	COMBINED
Teachers	229 (85,8)	38 (14,2)	267
HOD's	34 (72,3)	13 (27,7)	47
TOTAL	263 (83,8%)	51 (16,2%)	314

$$\chi^2 = 5,30 \quad df = 1 \quad p < 0,05$$

#### B. Role Ambiguity

Because of the endemic uncertainty regarding teachers' role in the school, role ambiguity may be considered to be a pervasive part of teachers' experience (Dunham, 1977; Schwab & Iwanicki, 1982).

Role ambiguity is associated with a lack of clarity regarding an employee's rights, responsibilities, methods, goals, status or accountability (Farber, 1983:6). Factors which may lead to role ambiguity among teachers include ambiguous criteria for evaluating achievement, the

increasing complexity of tasks and technology, the rapidity of organizational change and the interconnectedness of organizational positions.

Furthermore, many teachers lack the psychological knowledge needed to cope with the insecurity resulting from the unpredictability and contradictions of their job (Dunham, 1981).

a) Overall Findings

Data indicating the extent to which the sample perceived role ambiguity factors to be a source of occupational stress are presented in Table 4.22.

The most important source of stress resulting from role ambiguity in this study related to the stressor : "There are many times when I do not feel sure about the manner in which my superiors evaluate my teaching" (Table 4.22). In this respect Gowler and Legge state that individuals in organizations are likely to become stressed if, "on the one hand, they feel they must achieve, and on the other hand, the success criteria which define and evaluate their achievement are ambiguous" (1975:64).

The fact that this issue of evaluation was ranked fourth in the list of nine role-related stressors (Table 4.18), third among the twenty task- and situation-based sources of stress in Question 10 (Table 4.3), and was identified as the second

most important source of stress during the interviews, confirms the finding that this is a major source of stress to teachers.

TABLE 4.22

ROLE AMBIGUITY FACTORS AND PERCEIVED STRESS

RANK ORDER	ITEM	NO	NOT SURE	YES
4	Am not sure how my superiors evaluate my teaching	60 (16,7%)	61 (16,9%)	239 (66,4%)
6	Too little authority to carry out my responsibilities in the manner I see fit	89 (24,7%)	57 (15,8%)	214 (59,4%)
9	Directives or instructions are vague	192 (53,3%)	86 (24,0%)	82 (22,8%)

Intragroup comparisons of the data in respect of this factor showed significant demographic differences only for rank. This finding will be discussed presently.

Another important source of role ambiguity identified by the sample concerns being given "too little authority to carry out my responsibilities in the manner I see fit" (Table 4.22).

During the interviews comments such as the following were made regarding role ambiguity factors :

*"In English (teaching), one cannot be too prescriptive. I do things the way I want to".*

[Male Teacher : 10 years' experience]

*"Teachers are afraid to say that they would like to do something their way. There is always a particular way which is the right way".*

[Female teacher : 9 years' experience]

*"I feel I am not being evaluated properly. Last year I was good enough to act as Head of Department for an entire year. Then how come I did not get a merit notch. Somebody slipped up somewhere - certainly it was not me".*

[Male Teacher : 11 years' experience]

Further analyses of the data showed significant differences in respect of age, teaching experience and rank. These will be dealt with presently.

In contrast to the findings relating to the above two sources of role ambiguity, communication from superiors (Item 11.2) did not appear to be an important source of role stress for teachers in the sample (Table 4.22). It was also ranked last for the entire sample and for each of the teacher-sex subgroups, and had a  $\bar{X}$  of only 1.70 (Table 4.18). Furthermore,  $\chi^2$  tests showed that all six

demographic characteristics appeared to have no influence on teachers' perceptions of this stressor since no significant differences were found.

b) Findings Related to Subgroups

i) Rank, Uncertainty about the Manner in which Superiors evaluate Teaching and Perceived Role stress.

Data related to rank are presented in Table 4.23 below :

TABLE 4.23

RANK AND PERCEIVED ROLE AMBIGUITY ARISING FROM  
EVALUATION OF TEACHING

SUBGROUPS	YES	NO	COMBINED
Teachers	208 (83,2)	42 (16,8)	250
HOD's	31 (63,3)	18 (36,7)	49
TOTAL	239 (79,9%)	60 (20,1%)	299

$$x^2 = 10,15 \quad df = 1 \quad p < 0,01$$

The results showed that significantly more Level 1 teachers (83,2%) than HOD's (63,3%) perceived this factor to be more stressful. This may be explained by the fact that HOD's attain their position because of their expertise and experience in their subject area.

ii) Teaching Experience, too little Authority and Perceived Role Stress

Fig. 4.2 graphically illustrates the data relating to length of teaching experience and too little authority.

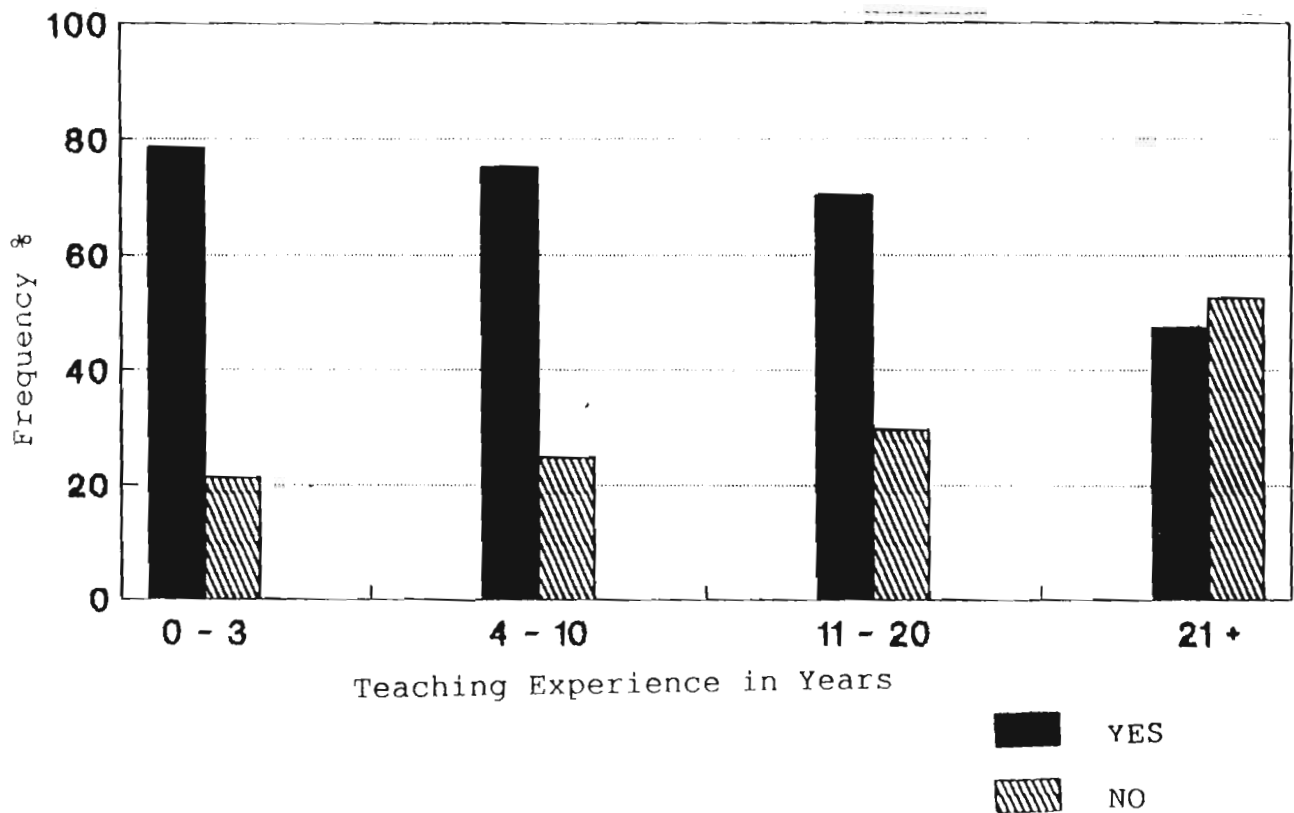


Fig. 4.2 : PERCEIVED STRESS LEVELS ARISING FROM TOO LITTLE AUTHORITY : DATA RELATING TO TEACHERS IN THE FOUR TEACHING EXPERIENCE CATEGORIES

The statistics reveal a distinct trend : the percentage of respondents who agree with this statement decrease with increased teaching experience. A large proportion of the teachers (70-79%) with 0-3, 4-10 and 11-20 years' teaching experience appear to perceive this issue as being stressful. In contrast, over half the number of older teachers with 21+

years experience (53%) perceive this factor as not stressful. A probable explanation for this disparity is that teachers in the 21+ years category are senior teachers and HOD's who, because of their experience and expertise, may not be so constrained and prescribed to in the execution of their responsibilities.

iii) Age, Too little Authority and Perceived Role Stress

The results show that significantly more teachers in the 20-39 year age range (73-79%) compared to older teachers in the 40+ category (54%) indicated that they have too little authority to carry out their responsibilities in the manner they see fit, ( $\chi^2 = 11,68$ ;  $p < 0,01$ ). A probable reason for this disparity is that a large proportion of teachers in the 40+ years group (83%) are HOD's who, as members of the Management Committee, have more authority to carry out their duties as they see fit.

iv) Rank, Too little Authority and Perceived Role stress

Data relating to rank and authority are presented in Table 4.24

Table 4.24 shows that three-quarters of Level 1 teachers (75,2%) perceive themselves as having too little authority for their responsibilities. In contrast, more than half the number of HOD's (53,1%) perceive the opposite to be the case. These results appear to substantiate what was said

earlier, viz. that because of their seniority in respect of age, experience and rank, and because they are part of the Management Committee, HOD's are given more authority to carry out their responsibilities in the manner they see fit.

TABLE 4.24  
RANK AND PERCEIVED ROLE AMBIGUITY ARISING FROM  
TOO LITTLE AUTHORITY

SUBGROUPS	YES	NO	COMBINED
Teachers	191 (75,2)	63 (24,8)	254
HOD's	23 (46,9)	26 (53,1)	49
TOTAL	214 (70,6%)	89 (29,4%)	303

$$\chi^2 = 15,81 \quad df = 1 \quad p < 0,01$$

### C. ROLE OVERLOAD

Role overload has been shown to be an important factor in causing stress among those who work in organizations (Capel, 1989:36; Farber, 1983:6).

Among teachers the constant interaction with and responsibility for pupils, taking school work home, being heavily involved in extracurricular activities, and teaching many different classes per week (resulting in extra preparation for a greater variety of lessons) could be



important factors in increasing a teacher's workload, and could lead to a situation where a teacher does not have enough time away from the job to relax and recover.

Besides this quantitative overload (i.e. having too much to do), there may also be qualitative role overload, when increasingly complex work requires skills or abilities that are beyond a teacher's current level of functioning. Although these shortcomings may often be attributed to factors such as inadequate training or experience, teachers may blame themselves for their inadequacies and thereby aggravate the stress generated by their situation. In this context role overload may lead to role ambiguity and role conflict (Otto, 1986:126; Farber, 1983:6).

a) Overall Findings

The extent to which teachers in the sample felt stressed by role-overload factors is illustrated in Table 4.25.

Significantly, "the amount of work adversely affects the quality" (i.e. qualitative overload) and having "too heavy a workload" (i.e. quantitative overload) also feature among the three prime role stressors for the total sample. These variables occupy first and third positions respectively (Table 4.18). Furthermore, both these stressors are major sources of role stress for HOD's (ranked first and second respectively) and Level 1 teachers alike (ranked second and fourth respectively).

TABLE 4.25

## ROLE OVERLOAD FACTORS AND PERCEIVED STRESS

RANK ORDER	ITEM	NO	NOT SURE	YES
1	The amount of work adversely affects the quality	49(13,6%)	45(12,5%)	266(73,9%)
3	I feel I have too heavy a workload a workload	68(19,0%)	36(10,0%)	256(71,0%)
8	I am given many duties for which I have not been adequately trained	128(35,6%)	57(15,8%)	175(48,6%)

Intragroup comparisons of the data relating to these two stressors reveals no significant differences among the six demographic subsamples (Table 4.19). These findings indicate that both role factors cause a great deal of frustration and stress among the majority of teachers.

Esteve (1989:18) argues that the lack of time and the increasing demands made on teachers forces them to "fragment their activities since they have to operate, at the same time, on several fronts, for example, maintain discipline but be sympathetic and affectionate; give individual attention to brighter and slower students; maintain a pleasant atmosphere in the classroom; plan the work to be done; mark work and evaluate students, help students with

problems; communicate with parents; organize extra-curricular and other school activities; attend meetings; carry out playground and other duties; and take care of bureaucratic problems". This fragmentation of work is a principal cause of exhaustion among teachers, which may later lead to other problems.

The following quotations illustrate the problems experienced by Indian teachers in this respect :

*"Apart from the normal duties of the classroom, and getting marking and other clerical work up to date, there are other extra-curricular duties that you have to fulfil. This takes a lot out of you because, quite frankly, just to teach in the classroom is mentally exhausting because you have pupils of different abilities who take up a great deal of your attention. So, after school the extra-curricular duties become an added burden so that, by the end of the day, you are totally exhausted".*

[Female teacher : 9 years' experience]

*"There are times when [the workload] gets too heavy, for example when marking piles up. You may, for some reason, for example when marking composition, not be able to complete this in one week so a backlog builds up creating pressure".*

[Female teacher : 3 years' experience]

*"This is because we keep too many records. If we keep fewer records, our workload will become far less".*

[Male teacher : 7 years' experience]

The statistics in Table 4.25 show that the sample appeared to be greatly divided in its response to the role stressor "I feel that I am given many duties for which I have not been adequately trained." Furthermore,  $\chi^2$ -tests revealed significant differences in teachers' perceptions of this issue in respect of teaching experience, rank, and sex. These findings will be discussed below.

b) Findings Related to Subgroups

i) Teaching experience, Inadequate training and  
Perceived Role Stress

The data in Table 4.26 suggest that teachers in all four teaching experience subgroups appear to be divided in how they perceive this issue.

Interestingly, lesser experienced teachers with 0-10 years' experience (56-67%) perceive themselves as not being adequately trained for many duties they have to perform. By contrast, more than half the number of more experienced teachers in the 11-20 and 21+ years categories (51-56%) disagree with the statement. However, the large numbers of teachers in this latter category who still have this problem

(44-49%) seem to indicate that the 51-56% of teachers who say "No" may have had this problem in their earlier years of teaching, but that, with increased experience and through the acquisition of skills, they may have resolved their problems to some extent.

TABLE 4.26

TEACHING EXPERIENCE AND PERCEIVED ROLE STRESS  
ARISING FROM INADEQUACY OF TRAINING

SUBGROUPS	YES	NO	COMBINED
0-3 years	23 (56,1)	18 (43,9)	41
4-10 years	94 (67,1)	46 (32,9)	140
11-20 years	40 (49,4)	41 (50,6)	81
21+ years	18 (43,9)	23 (56,1)	41
TOTAL	175 (57,8%)	128 (42,2%)	303

$$\chi^2 = 10,65 \quad df = 3 \quad P < 0,05$$

These results may also be explained by the fact that the teaching role has become more complex. As a result teachers may be required to assume a number of additional responsibilities and duties requiring new skills or abilities for which their initial teacher training may not have prepared them.

Teachers' difficulties may include the following areas :  
teaching duties (e.g.. skills in generating pupil interest,  
dealing with individual differences, setting of tests and

examinations, marking skills); administrative duties (e.g.. use of the computer and the duplicating machine); sports duties (e.g. coaching and umpiring skills); and skills in establishing clubs and organizing activities.

## ii) Rank, Inadequate Training and Perceived Role Stress

The data in Table 4.27 suggest that rank may have a significant influence over teachers' perceptions of stress related to adequacy of training.

TABLE 4.27

RANK AND PERCEIVED ROLE STRESS ARISING FROM  
INADEQUACY OF TRAINING

SUBGROUPS	YES	NO	COMBINED
Teachers	153 (61,2)	97 (38,8)	250
HOD's	22 (41,5)	31 (58,5)	53
TOTAL	175 (57,8%)	128 (42,2%)	303

$$\chi^2 = 6,95 \quad df = 1 \quad p < 0,01$$

The results were found to be highly significant ( $p < 0,01$ ). While 61% of Level 1 teachers report that they are given many duties for which they have not been adequately trained, almost the same percentage of HOD's (59%) disagree. The explanations given earlier for teaching experience may hold true for rank as well.

### iii) Sex, Inadequate training and Perceived Role Stress

While a large proportion of both male (51,7%) and female teachers (63,6%) perceived themselves as not having been adequately trained for many teaching duties that they have to perform, significantly more females indicated this ( $\chi^2 = 4,44$ ;  $p < 0,05$ ). This disparity may be explained by the fact that female teachers may be more ready than male teachers to admit to their shortcomings. Alternatively, male teachers may have made a greater effort to remedy their shortcomings through the acquisition of appropriate skills, thereby reducing their feelings of inadequacy.

Overall, the results show that stress is prevalent among Indian secondary school teachers and that there are many aspects of a teacher's role, task and work situation which can become sources of stress. Furthermore, intragroup comparisons of the data indicate that biographic characteristics of teachers such as sex, marital status, age, teaching experience, qualification and rank, are influential in mediating teacher's perceptions of various factors that contribute to stress.

The next chapter will deal with the findings of this study pertaining to symptoms, coping behaviours and other psychological factors related to stress in teachers.

## CHAPTER FIVE

### FINDINGS OF THE PRESENT STUDY (CONTINUED)

#### SYMPTOMS, COPING BEHAVIOURS AND PSYCHOLOGICAL FACTORS RELATED TO STRESS IN TEACHERS

Data pertaining to the first four of the eight aims of this study were analysed in the previous chapter. In this chapter the data relating to the last four aims (i.e. Parts Two, Three and Four of the Teacher-Occupational Inventory) will be examined. For easy reference these aims are numbered sequentially, following on the aims already considered in Chapter Four.

Answers will be sought to the following questions, each corresponding to the four remaining aims :-

- 5) What are some of the commoner symptoms experienced by teachers in times of acute stress? (Question 12)
- 6) On which behaviours and actions do teachers commonly rely in their attempts to cope with stress? (Question 13)



- 7) Do "stressed" and "relatively less stressed" teachers differ significantly in their responses to items related to psychological functioning? (Question 14)
- 8) What are the aspects of their work situation which give teachers
- a) most satisfaction and
  - b) least satisfaction? (Questions 15, 16, 17)

## 5. COMMON SYMPTOMS EXPERIENCED BY TEACHERS IN TIMES OF ACUTE STRESS

### 5.1 Overall Findings

It will be recalled that the secondary teachers surveyed had been requested to indicate from a checklist of twelve symptoms, only those symptoms (psychological, physiological and behavioural) which they had displayed/experienced *strongly* in the school situation during the past year (Appendix A). Table 5.1 furnishes information in this respect for the total sample and teacher sex subgroups.

It is important to note that of the 360 teachers who participated in this study a very small minority (3,61%) reported experiencing no negative symptoms at all. On the other hand, one-third of the sample (33,3%) reported experiencing six or more symptoms.

In overall terms, the statistics indicate that the four most common symptoms reported by the sample, in rank order were : "feelings of exhaustion"; "frustration"; "tension headaches"; and "anxiety". These findings seem to be broadly consistent with those of Kyriacou and Sutcliffe (1978b), Blase (1986) and Otto (1986) although different symptom scales were used. In Kyriacou and Sutcliffe's (1978b) study, for example, "exhausted" and "frustrated" were ranked first and second respectively.

TABLE 5.1

FREQUENCY AND RANK ORDERS OF SYMPTOMS FOR  
THE TOTAL SAMPLE AND TEACHER SEX SUBGROUPS

ITEM NO	SYMPTOM	TOT SAMPLE		MALES		FEMALES	
		%	RANK	%	RANK	%	RANK
12.5	Exhaustion	83,6	1	80,6	1	86,7	1
12.3	Frustration	76,9	2	77,8	2	76,1	2
12.1	"Tension" headaches	60,8	3	53,9	4	67,8	3
12.4	Anxiety	56,7	4	63,3	3	50,0	4
12.10	Bodily pains	43,3	5	43,3	7	43,3	5
12.12	Indifference & apathy	41,7	6	45,0	5	38,3	6
12.2	Feeling tearful	21,1	7	9,4	12	32,8	7
12.7	Feelings of isolation	17,2	8	16,1	8	18,3	9
12.6	Weight loss	16,4	9	12,2	11	20,6	8
12.9	Increased smoking	14,2	10.5	25,6	6	2,8	11
12.11	Increased use of tranquilizers	14,2	10.5	16,1	8	12,2	10
12.8	Increased consumption of alcohol	8,9	12	16,1	8	1,7	12
	NUMBER =	360		180		180	

The least common symptoms identified were : increased smoking; increased use of tranquilizers; and increased consumption of alcohol. This finding is not surprising. Teachers generally are enlightened, knowledgeable and educated people who have insight into their behaviours. They seem to realize that these ways of responding to stress are counterproductive and self-destructive.

Similar results were obtained during the interviews although the percentages obtained were markedly lower. Teachers identified the most frequent symptoms as : exhaustion (40%); tension headaches (30%); and frustration (23%). Other stress symptoms identified by the interviewees that were not on the researcher's checklist included sleeplessness, need for increased sleep, depression, displaced anger, and "acid in stomach".

Additional qualitative information was obtained from interviewees' responses to the question : "How does excessive stress affect your attitude and behaviour

- a) towards your superiors?
- b) towards your pupils?
- c) towards your family? and
- d) towards people outside school? (Appendix B)

The most common negative stress reactions identified by interviewees included the following :-

- a) towards superiors : resentment and anger

- b) towards pupils : enforcing harsh discipline; "keeping a tight rein" on pupils; cutting down on pupils' freedom; being stricter than normal; reprimanding pupils more than usual in order to give vent to anger; being abrupt with pupils.
- c) towards family : irritability, displacement of anger onto children or spouse; being less sociable; being withdrawn; wanting to be left alone "in peace".
- d) towards other people outside school : the marked reduction of contacts with people outside school; inability to relax in company of friends.

The overall results, however, mask strong differences among the six demographic subsamples in respect of specific types of symptoms experienced. These will now be discussed.

## 5.2 Findings Related to Subgroups

### i) Male vs Female Teachers

As Table 5.1 reveals, males and females show strong similarities as well as strong gender differences in their experiences of overall, as well as specific, forms of stress.

Both males and females identified the four most common symptoms as exhaustion, frustration, "tension" headaches, and anxiety. However, among women, tension headaches seem to be more prevalent (68%) compared to anxiety (50%).

Conversely, males seem to experience more anxiety (63%) and less tension headaches (54%). This latter finding appears to be unusual since, according to Aneshensel and Rutter (1991:171), females tend to be at greater risk of anxiety disorders (2,32;  $p < .001$ ).

Males and females seem to display similar symptom levels for "frustration", "feelings of isolation" and "bodily pains".

Consistent with the findings of Kyriacou and Sutcliffe (1978b), females in the study reported significantly more frequent symptoms than males for three items : "exhaustion" (89% vs 81%); "tension headaches" (68% vs 54%); and "feeling tearful" (33% vs 9,4%). This difference may be explained by the fact that culture may have an important influence on how men and women express stress. While women are more likely to express distress in affective terms, men are more likely to express it indirectly, for example, by behaving aggressively or engaging in heavy drinking (Otto, 1986 : 140; Aneshensel and Rutter, 1991:171).

It is interesting to note that, although both sex subgroups identified increased smoking, increased use of tranquilizers, and increased consumption of alcohol as the three least common symptoms of stress (Table 5.1), significantly more men than women reported engaging in these behaviours. In this respect it is worth noting that Indian culture still frowns upon Indian women smoking and drinking; this seems to be reflected in the findings.

Again, although "indifference and apathy" was found to be relatively high for both sexes, it seemed to be more prevalent among males (45%) than females (38%). This may be the consequence of severe frustration (Dunham, 1984 : 96-97). Distancing oneself inwardly to the point of indifference and depersonalization may be a psychological coping mode used more often by men and is one of the major dimensions of burnout (Otto, 1986:140).

Another very interesting observation is that, contrary to the findings of Otto (1986), male teachers as a group reported more symptoms than female teachers (827 and 811 symptoms respectively) in the present study. This was surprising, especially in view of the fact that society conditions men to conceal their feelings. However, this study seems to suggest that Indian males are willing to admit to experiencing stress.

#### ii) Married vs Unmarried Teachers

Both married and unmarried teachers appear to experience similar symptom levels for "exhaustion", "anxiety", "weight loss", and "indifference and apathy".

Married teachers seem to display more of the following symptoms than their unmarried colleagues : "Tension headaches" (66% vs 43%), "frustration" (78% vs 73%),

"increased consumption of alcohol" (10% vs 6%), "increased smoking" (15% vs 11,6%)' "bodily pains" (46% vs 35%); and "increased use of tranquilizers" (17% vs 6%).

Unmarried teachers, on the other hand, tend to exhibit higher levels of the following symptoms than married teachers : "feeling tearful" (26% vs 20%) and "feelings of isolation" (21% vs 16%).

iii) Younger vs Older, Less Experienced vs More Experienced, and Graduates and Diplomates vs Postgraduates.

Generally, the statistics revealed that diplomates and graduates in the 20-39 year age group with 0-20 years teaching experience reported higher symptom levels than older teachers and post graduates with 21+ years experience for the following items : "exhaustion", "feeling tearful", "feelings of isolation" and "weight loss". In this respect it is worth noting that symptoms such as weight loss and feeling tearful are most likely to be reported by females, 89% of whom are clustered in the 20-39-year category.

High frequency levels of "tension headaches", "anxiety", "indifference and apathy" and bodily pains" seemed to be prevalent for all age and experience subgroups. However, "indifference and apathy" and "anxiety" appeared to peak for teachers in the 30-39 year age groups (52% and 62%

respectively) after which these symptoms showed a decrease among the older teachers in the 40+ years group (30% + 56% respectively).

Furthermore, "bodily pains" appeared to increase with age but decrease with qualification, with postgraduates reporting lower symptom levels (35%) than either graduates (40,5%) or diplomaes (52%). The latter finding may be explained by the fact that more postgraduates are clustered in the younger 20-39 years age category (19%) while only 11,4% of postgraduates are 40 years or older.

Interestingly, the symptoms "bodily pains", "increased smoking" and "increased use of tranquilizers" seem to show a particular trend (Table 5.2)

TABLE 5.2

LENGTH OF TEACHING EXPERIENCE AND BODILY PAINS,  
INCREASED SMOKING AND INCREASED USE OF TRANQUILIZERS

ITEM NO.	SYMPTOMS	TEACHING EXPERIENCE			
		0-3 YRS	4-10 YRS	11-20 YRS	21+YRS
12.10	Bodily pains	33,3%	39,6%	50,0%	54,3%
12.9	Increased smoking	7,4%	14,0%	15,6%	19,6%
12.11	Increased use of tranquilizers	11,1%	12,8%	13,5%	23,9%

N = 360



Table 5.2 shows that the symptom levels for each of the above three symptoms appear to increase with increased teaching experience (and age). This suggests that the more experienced/older the teacher, the more likely he/she is to develop bodily pains and to indulge in increased smoking and use of tranquilisers.

Fig. 5.1 gives a pictorial comparison of the distributions with regard to the above three symptoms.

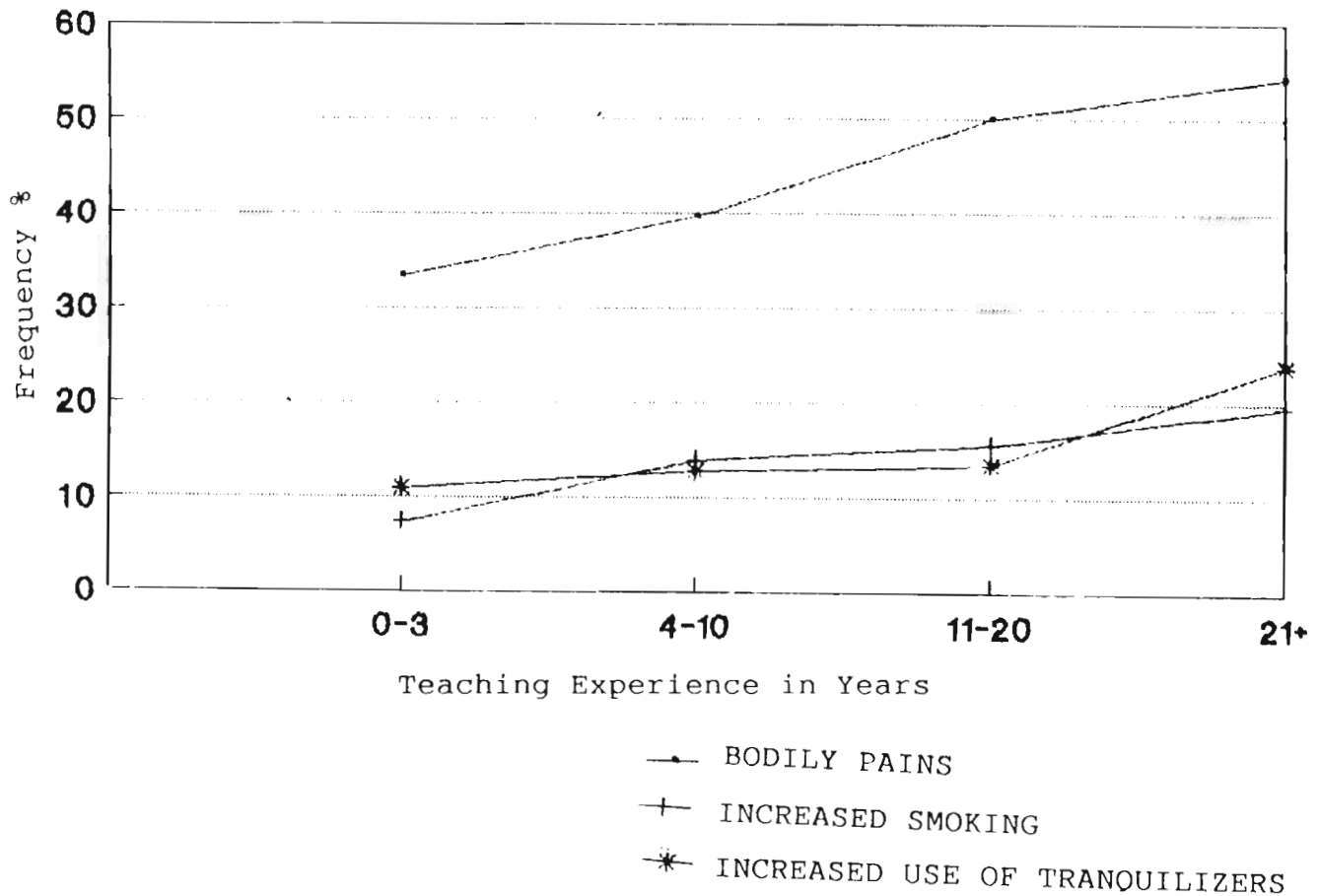


Fig. 5.1 : THE RELATIONSHIP BETWEEN LENGTH OF TEACHING EXPERIENCE AND FREQUENCY OF SYMPTOMS FOR THE VARIABLES BODILY PAINS, INCREASED SMOKING AND INCREASED USE OF TRANQUILIZERS.

iv) Level 1 Teachers vs HOD's

The statistics show that both Level 1 teachers and HOD's exhibit similar symptom levels for "tension headaches" (61% vs 62% respectively); "anxiety" (57% vs 57%), and "increased consumption of alcohol" (9% vs 8%).

Level 1 teachers display higher symptom levels than HOD's for "exhaustion" (85% vs 78%), "frustration" (80% vs 62%), "indifference and apathy" (43% vs 35%), "feeling tearful" (24% vs 7%); "feelings of isolation" (18% vs 12%) and "weight loss" (18% vs 7%). These differences may be explained by the fact that HOD's generally have reduced teaching loads when compared to Level 1 teachers. Furthermore, because of their maturity, longer experience and status, HOD's may have acquired the confidence and ability to cope better with difficult children and other demands of the teaching situation.

By contrast, HOD's, compared to Level 1 teachers, exhibit higher frequency levels in respect of the following variables : "increased smoking (20% vs 13%); increased use of tranquilizers (18% vs 13%) and bodily pains (48% vs 42%)".

To summarise, the above analysis of symptoms displayed by the teachers surveyed reveals that they display not only similarities, but important demographic differences in their experience of overall and specific symptoms of stress.

## 6. COMMON ACTIONS AND BEHAVIOURS USED BY TEACHERS TO COPE WITH STRESS

Research evidence suggests that coping plays a crucial mediating role in the stress process. When individuals are faced with threatening or potentially stress-producing situations, they will actively engage in attempts to maintain or regain control. How they cope with stress is even more important to overall morale, social functioning, and health/illness than the frequency and severity of stressful episodes themselves (Cohen & Lazarus, 1979; Fisher, 1986; Lazarus & Launier, 1978).

### 6.1 OVERALL FINDINGS

One of the aims of the present study was to investigate the common strategies (personal and interpersonal; palliative or direct) that teachers use when coping with occupational stress. Personal coping resources include work strategies, positive attitudes and out-of-school activities. The interpersonal resources are social support activities, such as talking over stressful incidents with a colleague, spouse or friend (Dunham, 1983).

The means and rank orders for the twelve coping actions and behaviours for the whole sample as well as for the teacher sex subgroups are listed in Table 5.3.

TABLE 5.3

COPING ACTIONS : RANK ORDERS AND MEANS  
FOR THE TOTAL SAMPLE AND TEACHER SEX SUBGROUPS

ITEM NO.	COPING ACTION	TOTAL SAMPLE		MALES		FEMALES	
		RANK	MEAN*	RANK	MEAN*	RANK	MEAN*
13.5	+Try to keep things in perspective	1	3.03	1	3.11	1	2.96
13.2	=Let people know exactly where you stand	2	2.59	2	2.63	4	2.56
13.10	+Express feelings and frustrations to others	3	2.54	5	2.44	2	2.63
13.9	+Engage in positive thoughts and future rewards	4	2.53	3	2.52	5.5	2.53
13.1	+Throw yourself into your work	5	2.47	8	2.36	3	2.57
13.3	=Try to get advice and suggestions from some person	6	2.44	9	2.34	5.5	2.53
13.4	+Try to see the humour of the situation	7.5	2.43	6	2.43	8	2.43
13.8	+Become involved in some recreation or hobby	7.5	2.43	4	2.49	9	2.35
13.12	+Try to forget work when the day is finished	9	2.41	10	2.29	7	2.51
13.7	+Reduce tension through physical activity	10	2.22	7	2.40	11	2.08
13.6	+Take no action and carry on as usual in the hope that the tension wears off	11	2.19	11	2.16	10	2.23
13.11	+Take time off from school to recover	12	1.44	12	1.39	12	1.47
N U M B E R		360		180		180	

\* Values range on a rating scale from 1(Never) to 4(Very Often)

+ Palliative Strategies

= Direct Action Strategies

Table 5.3 shows that the most frequently used coping actions appear to be, in rank order : "try to keep things in perspective", "let people know exactly where you stand" and "express feelings and frustrations to others". These include both direct action and palliative strategies. Interestingly, "try to keep things in perspective" also emerged as the most popular coping action in Kyriacou's (1980b) study, on which the present coping scale was based. This strategy was also reported as one of the most popular coping responses in the investigations of Kyriacou & Pratt (1985) and Freeman (1987).

The two least frequently used strategies identified in this study, viz., "take no action and carry on as usual" and "take time off from school to recover" (both palliative strategies) also featured as the two least popular coping actions in Kyriacou's (1980b) study involving 33 coping actions.

The two coping actions by which the teacher "expresses his/her feelings" and "seeks the advice of and support from others," are ranked second and sixth respectively. This result indicates, as Kyriacou (1980) and Dunham (1980, 1984) suggest, that these may be common strategies adopted by teachers to cope with work stress.

Similar results were obtained during the interviews with the thirty teachers. In response to the question "How do you attempt to cope with the pressures of teaching?" it was found that teachers use the following strategies :

- 1) "express your feelings and frustrations to others" (reported by 40% of the interviewees);
- 2) "try to keep things in perspective" (37%);
- 3) "become involved in some recreation or hobby" (30%).

This last strategy was used "Often" or "Very Often" by 42% of respondents in the main study. Furthermore, the work strategies adopted at school by interviewees, especially the more experienced teachers, included being well organized and establishing priorities.

In overall terms, these results indicate that teachers use a wide range of skills and techniques in order to reduce work stress.

## 6.2 FINDINGS RELATED TO SUBGROUPS

The two most popular and two least popular coping actions for each of the subgroups are listed in Appendix C. "Try to keep things in perspective" appeared as the most popular technique in all seventeen subgroups with frequencies for often/very often ranging from 97% to 100%, while "let people know exactly where you stand" was rated as one of the frequently used coping actions in nine out of seventeen instances. Similarly, "take time off from school to

recover", was reported as the least frequently used action by all seventeen sub-groups and showed a declining trend according to age (19% to 3%) and teaching experience (13% to 0%), while "reduce tension through physical activity" appeared eleven out of seventeen times.

Table 5.4 shows that the demographic variables sex, marital status, age, teaching experience, qualification, and rank may have an important influence on the types of coping actions teachers use.

i) Male vs Female Teachers

Table 5.3 shows that the sexes differ significantly on the majority of the coping action (in ten out of twelve instances). Females appear to be more disposed to seek advice and share their problems with others than their male colleagues. This observation is supported by the fact that "express feelings and frustrations to others" and "try to get advice and suggestions from some person" were ranked second and fifth respectively.

Furthermore,  $\chi^2$  tests of significance show that more females use the technique "express your feelings and frustrations to others" ( $\chi^2 = 5,98$ ;  $p < 0,05$ ). The statistics further reveal that 89,7% females compared to 76,6% males resort to this coping mode "often/very often". A possible reason for this is the fact that Indian women

have fewer channels to reduce their stress by means of physical activity, recreation or hobbies to reduce their stress.

TABLE 5.4

COPING ACTIONS : SUMMARY OF SIGNIFICANT RESULTS FOR SUBGROUPS

ITEM NO	COPING ACTION	SEX	MARITAL STATUS	AGE	TCH. EXP.	QUAL.	RANK
13.5	Try to keep things in perspective						
13.2	Let people know exactly where you stand						
13.10	Express feelings & frustrations to others	*5,98		**20,89	***12,33		***6,67
13.9	Engage in positive thoughts & future rewards						
13.1	Throw yourself into your work						
13.3	Get advice and suggestions from some person		*3,86		*8,99		
13.4	Try to see the humour of the situation					*8,27	
13.8	Become involved in some recreation or hobby			**14,02	*8,36		
13.12	Try to forget work when day is done						
13.7	Reduce tension through physical activity	**9,20			*8,65		
13.6	Take no action and carry on as usual						
13.11	Take time off from school to recover		*6,11				

\* :  $P < 0,05$

\*\* :  $p < 0,01$



Table 5.3 also shows that more men than women "try to reduce the tension through physical activity" (ranked tenth overall, seventh for males, and eleventh for females). This finding is supported by  $\chi^2$  tests which show that male teachers tend to resort to this coping mode significantly more often than their female colleagues (Table 5.5).

TABLE 5.5

TEACHER SEX SUBGROUPS AND PHYSICAL ACTIVITY AS A COPING MODE

SUBGROUPS	NEVER	OFTEN TO VERY OFTEN	COMBINED
Male	33 (32,0)	70 (68,0)	103
Female	55 (52,9)	49 (47,1)	104
TOTAL	88 (42,5%)	119 (57,5%)	207

$$\chi^2 = 9,20$$

$$df = 1$$

$$P < 0,01$$

Various possibilities account for this disparity. Males are generally more outgoing by nature. Moreover, they have more time, energy and greater access to facilities than females. Females, on the other hand, are more constrained by social commitments and demands (family, motherhood, work and household chores); hence they often have less time to engage in what one interviewee referred to as "these luxuries".

These reasons may also account for the fact that fewer females (never : 34%; often/very often : 66%) than male teachers (never : 24%; often/very often : 76%) "become involved in some recreation or hobby." This coping mode was ranked fourth for male teachers and ninth for female teachers.

Another interesting observation is that women teachers seem more inclined to throw themselves into their work (ranked third) than their male counterparts (ranked eighth) in order to cope with work stress. During the interviews no male teacher indicated that he resorted to this coping behaviour.

#### ii) Married vs Unmarried Teachers

Table 5.4 shows that marital status had an important influence on only two coping actions "get advice and suggestions from some person" and "take time off from school to recover".

$\chi^2$  tests showed that significantly more single than married teachers (96% vs 84%) resort to the technique "get advice and suggestions from some person" ( $\chi^2 = 3,86$ ;  $p < 0,05$ ). It is worth noting that a significant proportion of single teachers in the sample comprise younger, less experienced teachers who are probably more uninhibited in seeking pastoral care from their more senior and experienced colleagues. For the older married teachers, seeking help may mean appearing to lack self-esteem and inability to

solve one's own problems. It is also possible that they may use their spouses or other persons outside school as their confidantes.

Again, the data show that although the vast majority of both married (94%) and unmarried (84%) teachers never "take time off from school to recover" from stress, significantly more single teachers (15,6%) than married teachers (5,8%) reported that they resort to this coping behaviour "often/very often" ( $\chi^2 = 6,11$ ;  $p < 0,05$ ). It is probable that a large proportion of single teachers in the present study belong to the 0-3-year teaching experience category. The demands made on these teachers may be great and may include adjusting to the teaching situation, acquiring teaching and class management skills, improving their qualifications (42% of single teachers in the present study are engaged in part-time studies), and attempting to balance their professional and personal lives. In respect of the latter it must be noted that, because single teachers are generally younger with varied interests and pursuits, they may have a greater problem with backlog of work. All these demands may generate a great deal of stress among these teachers; they may therefore take time off from school more often to recover. The results in this study are supported by Simpson's (1976) finding that the highest rate for sickness (and absenteeism) among both male and female teachers is at the beginning of their teaching career.

iii) Less Experienced vs More Experienced Teachers

Teaching experience appeared to be an important moderator of the following four coping modes : "express feelings and frustrations to others" ( $p < 0,01$ ); "get advice and suggestions from some person"; "become involved in some recreation or hobby"; and "reduce tension through physical activity". The last three items were significant at the  $p < 0,05$  level.

Table 5.6 shows the distribution of the responses relating to the variable "teaching experience" in terms of the coping action "express feelings and frustrations to others".

**TABLE 5.6**  
**LENGTH OF TEACHING EXPERIENCE AND EXPRESSION OF FEELINGS**  
**AND FRUSTRATIONS TO OTHERS**

SUBGROUPS	NEVER	OFTEN TO VERY OFTEN	COMBINED
0-3 years	5 (16,1)	26 (83,9)	31
4-10 years	8 (9,3)	78 (90,7)	86
11-20 years	11 (19,3)	46 (80,7)	57
21 & over	10 (38,5)	16 (61,5)	26
TOTAL	34 (17%)	166 (83%)	200

$$\chi^2 = 12,33 \quad df = 3 \quad P < 0,01$$

A trend is discernible. More teachers with 0-3, 4-10 and 11-20 years' teaching experience (81-91%) report that they use this coping mode more often than their older, more

experienced colleagues who fall in the 21+ years category (61,5%). It is worth noting that a large proportion of teachers in the latter category are senior teachers and HOD's. As such they would be less inclined to "express their feelings and frustrations" to younger colleagues since this may be construed as a sign of weakness.

This observation appears to be supported by statistics for the coping mode "get advice and suggestions from some person". Again, there is a trend for the lesser experienced teachers who belong to the 0-3 and 4-10-year category (91-97%) to resort to this technique more often than their older, more experienced counterparts in the 11-20 and 21+ category (75-82%). Since they have been in the teaching profession for a longer period, older teachers, presumably, have developed other coping skills. Moreover, since many of them are married and have families, they have the support of others outside the profession.

Significant differences are also evident for the coping modes "reduce tension through physical activity" and "become involved in some recreation or hobby". Teachers appear to be greatly divided in their responses to the coping action "reduce tension through physical activity". This is illustrated in Table 5.7.

TABLE 5.7

LENGTH OF TEACHING EXPERIENCE AS VARIABLE IN REDUCING  
TENSION THROUGH PHYSICAL ACTIVITY

SUBGROUPS	NEVER	OFTEN TO VERY OFTEN	COMBINED
0-3 years	18 (60)	12 (40)	30
4-10 years	43 (41,7)	60 (58,3)	103
11-20 years	12 (27,3)	32 (72,7)	44
21 & over	15 (50)	15 (50,0)	30
TOTAL	88 (42,5%)	119 (57,5%)	207

$$\chi^2 = 8,65 \quad df = 3 \quad P < 0,05$$

A striking feature is the fact that 60% of beginning teachers with 0-3 years' teaching experience report that they NEVER resort to this coping mode. Because of the greater demands made on these teachers (mastering teaching skills, studying, marking, preparing lessons and teaching aids, demands in their personal lives, etc.), these teachers may not have sufficient resources in terms of time and energy to engage in strenuous physical activities. During the interviews it became apparent that beginning teachers devoted more time doing schoolwork at home than other, more experienced teachers.

Having survived the initial years of teaching, teachers in the 4-10-years' experience category may have more resources to engage in physical activity (Table 5.7). The eagerness to keep fit appears to peak during the 11-20-years' experience category (73%) after which, as a result of the

aging process, it seems to decline among the older teachers in the 21+ years' experience category (50%). This probably partly accounts for the parallel increase in "bodily pains" and age and experience (Table 5.2).

iv) Younger vs Older Teachers

Age emerged as a significant moderator of the coping modes "express feelings and frustrations to others" and "become involved in some recreation or hobby" ( $p < 0,01$ ).

In respect of teaching experience, significantly more teachers in the 20-24, 25-29, and 30-39-year-categories (77%, 88%, and 93% respectively) resort to expressing feelings and frustrations to others than their older colleagues in the 40+years' age group (61%). Again, significantly fewer beginning teachers in the 20-24-year age group (44%) become involved in some recreation or hobby. The reasons for the disparities that have been discussed above in respect of these two coping modes and teaching experience, may hold true for age as well.

v) Graduates vs Diplomates

Table 5.4 shows that there was only one instance when qualification proved to be a significant moderator, viz., for the coping mode "try to see the humour of the situation" ( $\chi^2 = 8,27$ ;  $p < 0,05$ ) In this respect a distinct trend

can be noticed. Postgraduates (86%) and graduates (76%) appear to adopt this coping technique more often than the lesser qualified diplomates (65%).

The developmental trend notion espoused by Fuller (1969) appears to be clearly illustrated in the case of this coping mode. A significant proportion of diplomates in this study (53,3%) were beginning teachers in the 20-24 year age group. In line with Fuller's theory, these inexperienced teachers tend to focus more on their adequacy as teachers and the accomplishment of new tasks in teaching. Because of the greater demands on these teachers, they presumably experience greater stress.

Conversely, 30% and 40,5% of teachers in the 30-39 and 40+ years age categories, respectively, are graduates and postgraduates. Because of their higher qualification, greater experience and maturity they have probably developed greater confidence in handling matters related to their jobs.

vi) Level 1 Teachers vs Heads of Departments

More Level 1 teachers (86%), than HOD's (67%), express their feelings and frustrations to others ( $\chi^2 = 6,67$ ;  $p < 0,01$ ). This is not unexpected especially when considered in the light of the significant findings reported earlier in respect of teaching experience and age (Table 5.6).



Level 1 teachers are probably in a better position to use this coping mode because they generally enjoy more sympathy and support from their peers. HOD's tend to be more content with their lot in the profession. Alternatively, HOD's do not readily express their feelings and frustrations to others lest it is construed as a sign of weakness and inappropriate for people of their status.

## 7. PSYCHOLOGICAL FUNCTIONING OF "STRESSED" AND "RELATIVELY LESS STRESSED" TEACHERS

It will be remembered that the purpose of administering the GHQ-12 in this study was to investigate the association between self-reported stress and psychological health/distress among teachers.

It is important to emphasize that the GHQ is not a measure of stress itself. Rather, it is one indicator of stress. The GHQ is designed to assess the likelihood of individuals suffering varying degrees of psychological distress.

### 7.1 OVERALL FINDINGS

The distributions of raw scores on the GHQ-12 for the 360 teachers in this sample for the sex and rank subgroups are graphically illustrated in Figures 5.2 and 5.3 respectively.

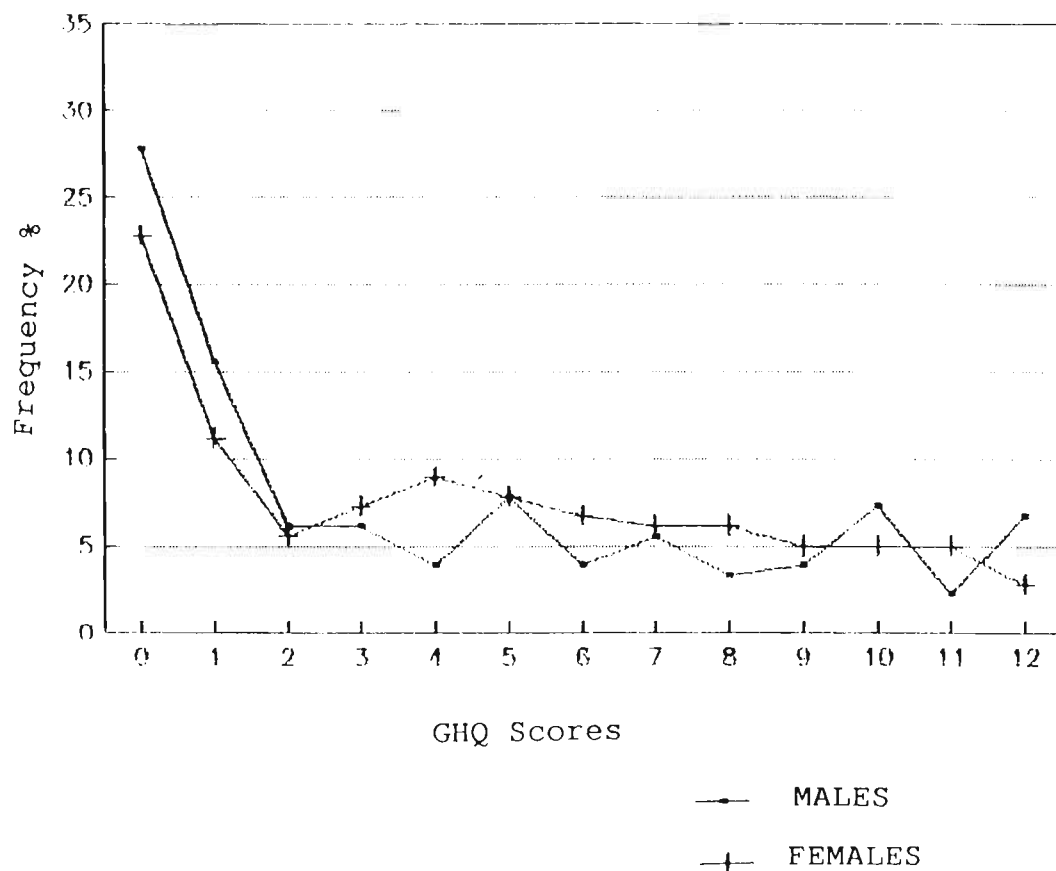


Fig. 5.2 : DISTRIBUTION OF GHQ SCORES BY SEX

Figure 5.2 shows that 25% teachers (28% males and 23% females) reported experiencing no negative symptoms. At the other extreme, 5% (7% males and 3% females) reported experiencing all twelve symptoms listed in the GHQ.

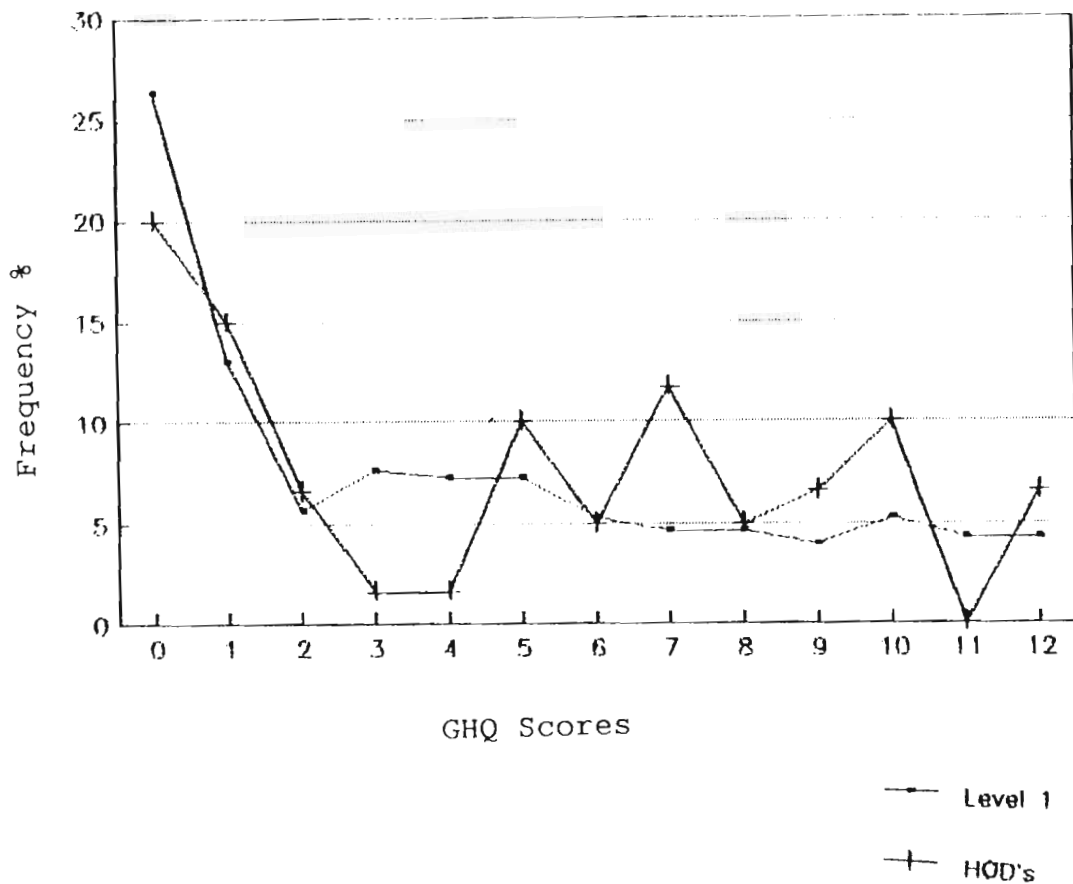


Fig. 5.3 : DISTRIBUTION OF GHQ SCORES BY RANK

Figure 5.3 shows that of the 25% teachers who reported experiencing no negative symptoms, 26,3% comprised Level 1 teachers and 20% HOD's. It is interesting to note that at the other end of the scale, more HOD's (6,7%) than Level 1 teachers (4,3%) reported experiencing all twelve symptoms.

In order to classify the respondents according to the extent to which they were distressed, and to enable direct comparison with the other results to be made, the classification system adopted by Tuettemann and Punch (1990) was used (see Chapter 3), and the teachers' GHQ scores were interpreted as follows : those in the *LOW GHQ* category (score 0-2) were regarded as "unlikely to be suffering from psychological distress"; in the *MEDIUM GHQ* category (score 3-5) there was a moderate likelihood that the respondents were suffering from psychological distress; and in the *HIGH GHQ* category (score 6-12) the likelihood of psychological distress was seen to be considerable. The distributions of GHQ scores according to these groupings for the entire sample, as well as for the sex and rank subgroups, are summarised in Table 5.8.

In overall terms, Table 5.8 shows that 55,6% of the teachers surveyed have GHQ scores greater than or equal to 3 and may, therefore, be classified as at least "moderately stressed". Thirty-five percent fall in the "high stress" category.

A further analysis shows, overall, that 37% of females and 33% of male teachers have scored in the "high stress" category and have mean scores of 4,33 and 4,01 respectively. At the other end of the scale, 49% of male teachers have scored in the "no stress" category, compared with only 39% females. However, these differences between males and females are not statistically significant ( $\chi^2 = 4,03$ ;  $p > 0,05$ ).

TABLE 5.8  
DISTRIBUTIONS OF GHQ SCORES FOR TOTAL SAMPLE AND FOR  
SEX AND RANK SUBGROUPS

SECONDARY TEACHERS	GHQ SCORES			MEAN SCORE
	LOW STRESS (0-2)	MEDIUM STRESS (3-5)	HIGH STRESS (6-12)	
Total Sample (%)	44,4	20,8	34,7	4,17
N=360	160	75	125	
SEX :				
Males (%)	49,4	17,8	32,8	4,01
N=180	89	32	59	
Females (%)	39,4	23,9	36,7	4,33
N=180	71	43	66	
RANK :				
Teachers (%)	37,5	22,3	27,2	4,04
N=300	135	67	98	
HOD's (%)	41,7	13,3	45,0	4,82
N=60	25	8	27	

It is of interest to note that the percentage of Indian teachers who scored in the "high stress" range is much higher than those reported, for instance, by Tuettemann and Punch (1990) for both the total sample and the sex subgroup. Furthermore, contrary to the findings of these investigators, more female than male teachers scored in the "high stress" category, while more males than females scored in the "no stress" range.

Table 5.8 also presents the data in terms of rank. It can be noticed that considerably more HOD's (45%) than Level 1 teachers (27%) suffer severe psychological stress. Moreover, the mean GHQ score for HOD's is 4,82 compared with 4,04 for Level 1 teachers. These differences between the teacher rank subgroups are, however, not statistically significant ( $\chi^2 = 7,48$ ;  $P > 0,05$ ). The reasons for this disparity are not clear.

The mean scores on the GHQ-12 for marital status, age, teaching experience and qualification are listed in Table 5.9 below. The means indicate that teachers aged 30 or more years and with teaching experience of 11 or more years, as well as graduates, tend to report higher symptom rates and greater stress than their colleagues.

An analysis of the data in terms of the clustering system was also adopted in this study. The purpose of this was to identify not only the most common symptoms reported, but also in which of the following key categories they were located : "social dysfunction", "anxiety and unhappiness" or "loss of confidence". Table 5.10 furnishes information in these two respects for the total sample and for the sex and rank subgroups. The mean scores for each of the three stress symptom clusters are also given.

TABLE 5.9

GHQ-12 MEAN SCORES RELATING TO MARITAL STATUS,  
AGE, TEACHING EXPERIENCE AND QUALIFICATION

DEMOGRAPHIC VARIABLE	MEAN SCORE
MARITAL STATUS:	
Married	4,16
Single	4,20
AGE:	
20-24 years	3,63
25-29 years	4,18
30-39 years	4,26
40+ years	4,23
TEACHING EXPERIENCE:	
0-3 years	4,31
4-10 years	4,01
11-20 years	4,47
21+ years	4,54
QUALIFICATION:	
Diplomates	3,88
Graduates	4,46
Postgraduates	4,23

The statistics in Table 5.10 reveal that five of the six most common symptoms reported by the total sample (ranked first, second, third, fifth and sixth) relate to the stress symptom cluster "anxiety and unhappiness" which also has the highest mean value of 44,1%. This result appears to support the findings of researchers such as Dunham (1984) and Kyriacou and Sutcliffe (1978b) who argue that anxiety is one of the major emotional responses to stress.

## 7.2 Findings Related to Subgroups

Analysis of the GHQ-12 also revealed several differences for each of the six demographic subgroups, viz., sex, marital status, age, teaching experience, qualification and rank. These will now be discussed.

TABLE 5.10

**ANALYSIS OF GHQ-12 : FREQUENCY AND RANK ORDERS OF SYMPTOMS  
FOR TOTAL SAMPLE, SEX AND RANK SUBGROUPS**

ITEM NO	SYMPTOMS	TOT. SAMPLE		MALES		FEMALES		TEACHERS		HOD'S	
		%	RANK	%	RANK	%	RANK	%	RANK	%	RANK
<u>SOCIAL PERFORMANCE/DYSFUNCTION</u>											
14.3	Playing a useful part in things?	28,9	9	27,1	9	28,3	9	27,0	9	33,3	8,5
14.4	Capable of making decisions?	20,0	11	22,2	11	17,8	11.5	18,3	11	28,3	10
14.7	Able to enjoy normal day-to-day activities?	45,3	4	43,9	2	46,7	4	43,7	4	53,3	3
	$\bar{X}$ FOR CLUSTER	31,1	-	31,3	-	31,0	-	29,7	-	38,3	-
<u>ANXIETY AND UNHAPPINESS</u>											
14.1	Been able to concentrate on whatever you are doing?	46,7	3	43,3	3.5	50,0	3	44,0	3	60,0	1
14.2	Lost much sleep over worry?	42,2	5	38,9	5	45,6	5	40,7	5	50,0	4.5
14.5	Felt constantly under strain?	52,5	1	48,3	1	56,7	1	51,7	1	56,7	2
14.9	Feeling unhappy and depressed?	47,2	2	43,3	3.5	51,1	2	46,7	2	50,0	4.5
14.12	Been feeling reasonably happy?	31,7	6	31,7	6	31,7	7	30,3	6,5	38,3	6.5
	$\bar{X}$ FOR CLUSTER	44,1	-	41,1	-	47,0	-	42,7	-	47,7	-
<u>LOSS OF CONFIDENCE</u>											
14.6	Couldn't overcome your difficulties?	30,3	7	30,6	7	30,0	8	29,7	8	33,3	8.5
14.8	Been able to face up to your problems?	27,2	10	28,9	8	25,6	10	25,0	10	38,3	6.5
14.10	Been losing confidence in yourself?	29,4	8	26,7	10	32,2	6	30,3	6.5	25,0	11
14.11	Been thinking of yourself as a worthless person?	16,4	12	15,0	12	17,8	11.5	16,7	12	15,0	12
	$\bar{X}$ FOR CLUSTER	25,8	-	25,3	-	26,4	-	25,4	-	27,9	-
	N U M B E R	360		180		180		300		60	



i) Males vs Females

Table 5.10 shows that the sex subgroups ranked "felt constantly under strain" as the most common stress symptom experienced (Rank 1). Both sexes also appear to experience similar symptom levels in respect of the stress symptom clusters "social dysfunction" and "loss of confidence". However, female teachers seem to experience "anxiety and unhappiness" more frequently than their male colleagues (47 vs 41%). This becomes clear when one examines the following four specific symptoms in this cluster : inability to concentrate (50% vs 43%); inability to sleep (46% vs 39%); feeling constantly under strain (57% vs 48%); and feeling unhappy and depressed (51% vs 43%).

A comparison of the statistics reported earlier in Table 5.8 indicates that more female teachers featured in the moderate to high stress ranges on the GHQ-12 than males (60,6% vs 50,5% ) and that, overall, they had a higher symptom mean score than male teachers (4,33 vs 4,01).

All the above statistics, considered together, suggest that women teachers as a group have higher symptom levels on the GHQ-12 than male teachers.

ii) Married vs Single Teachers

Table 5.9 indicates that married and single teachers have similar mean scores. Both subgroups also seem to experience similar symptom levels in respect of all three symptom clusters "social dysfunction (31% vs 31%)", "anxiety and unhappiness" (43,9% vs 44,4%) and "loss of confidence" (25,7% vs 26,2%). Specifically, married teachers appear to experience higher symptom rates for "felt constantly under strain" (54% vs 49%) and "been thinking of yourself as a worthless person" (17,5% vs 12,8%).

iii) Younger vs Older and Less Experienced vs More Experienced Teachers

Teachers in the 25-29 and 30-39-year categories appear to display much higher symptom levels in respect of the following three symptoms "(in)ability to enjoy your normal day-to-day activities" (46,7% and 48,3%), "felt constantly under strain" (57,8% and 52,5%) and "couldn't overcome your difficulties" (34,1% and 32,3%), than either the youngest teachers in the 20-24-year group (30%; 43,3%; 13,3%) or oldest teachers in the 40+-year group (44,2%; 46,8%; 27,3%). The results for all these three symptoms could, to some extent, be attributed to the extra demands made on teachers in the 25-39-year group in their professional and personal lives.

Teachers in all four age categories ranging from 20-24 to 40+ years appear to show an increase in symptom levels with increase in age for two symptoms : "(in)capable of making decisions" (13,3%; 16,3%; 22,9% and 24,7%) and "lost much sleep over worry" (36,7%, 40%, 43,2% and 46,8%).

By contrast, teachers in the four age and teaching experience categories seem to experience decreased symptom levels over age for the symptoms "been losing confidence in yourself" (33,3%; 31,9%; 28,8%, 24,7%). Among the younger, less experienced teachers this loss of confidence may be the result of feelings of inadequacy when they experience difficulties in mastering teaching and coping skills. However, with increasing experience and maturity, this loss of confidence seems to gradually fade away.

The symptom rates for the remaining six symptoms are more or less similar for all four age and experience categories.

#### iv) Diplomates vs Graduate Teachers

The data show an inverse relationship between symptom levels and qualifications in the case of the variable "felt constantly under strain" more diplomates experience strain : (57,4%) than either graduates (53%) or postgraduates (50%).

Graduates tend to have higher symptom levels in the stress symptom cluster "loss of confidence" (33,6%; 29,3%; 32,8% and 21,6%) as well as for the symptoms "(un)able to enjoy

your normal day-to-day activities" (50%) and "(not) feeling reasonably happy" (37,1%), compared to diplomates and postgraduates. Conversely, diplomates seem to experience lower stress and symptom levels in respect of all six of these symptoms than either graduates or postgraduates.

v) Level 1 Teachers vs HOD's

The results relating to the rank subgroups held some surprises, especially in the case of the HOD's.

An examination of the statistics in Table 5.10 shows that, except for symptoms 14.10 and 14.11 which relate to loss of confidence, HOD's as a group, tend to report inordinately high symptom levels for the remaining ten symptoms when compared to Level 1 teachers. Furthermore, a comparison of the mean symptom scores shows that HOD's as a group appeared to score higher than Level 1 teachers in all three stress symptoms areas, viz., "social dysfunction" (38% vs 30%), "anxiety and unhappiness" (48% vs 43%) and "loss of confidence" (28% vs 25%). Also, for four symptoms in the cluster "anxiety and unhappiness" HOD's responses ranged from 50% to 60% compared to Level 1 teachers' responses which ranged from 41% to 52%.

It will, moreover, be recalled that 45% of HOD's compared to 27,2% of Level 1 teachers had scored in the "high stress" range of the GHQ-12 (Table 5.8). Added to this is the fact that more HOD's than Level 1 teachers (6,7% vs 4,3%) reported experiencing all twelve symptoms (Figure 5.3).

A comparison of the specific symptoms reported by Level 1 teachers and HOD's in Table 5.10 also show interesting variations. While the total sample, the sex subgroups, and Level 1 teachers ranked the variable "felt constantly under strain" as the most important stress symptom experienced, 60% of HOD's on the other hand ranked "(being un)able to concentrate on whatever you are doing" as their number one symptom, followed by "felt constantly under strain" (reported by 57% of HOD's) as the next most common symptom. High scores on both these symptoms suggest that HOD's as a group, experience considerable anxiety. This could affect them adversely in the school situation.

All the above statistics, when considered together, suggest that HOD's as a group suffer greater psychological stress than Level 1 teachers.

#### 8. ASPECTS OF WORK SITUATION WHICH GIVE TEACHERS

- a) Most satisfaction and
- b) Least satisfaction

In line with Herzberg's two-factor theory of job satisfaction, it was hypothesised that teachers differ in the degree of satisfaction they derive from various aspects of their occupation. Consequently, in Questions 15 and 16, the secondary teachers surveyed were asked to answer two general open-ended questions : *"Which two aspects of teaching give you most satisfaction?"* and *"Which two aspects of teaching make you most unhappy?"*

Fig. 5.4 illustrates the eight aspects which teachers believed contributed most to their feelings of satisfaction with teaching as an occupation. Only a small minority of teachers (2,5%) indicated that teaching gave them no satisfaction at all.

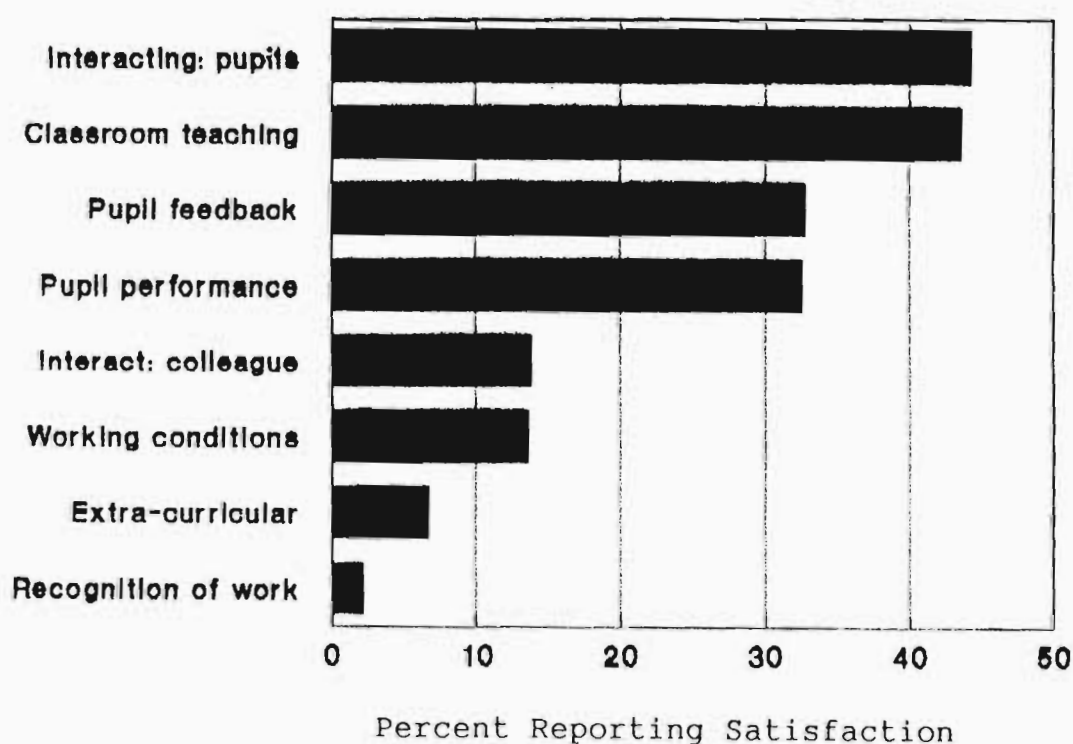


Fig. 5.4 : ASPECTS OF THE JOB WHICH GIVE TEACHERS MOST SATISFACTION

It is clear from Figure 5.4 that the teachers in the sample derive their chief source of satisfaction from the intrinsic aspects of teaching, i.e. from their relationship with pupils and from the positive feedback which pupils supply. This seems to result from teachers' positive self-evaluations of their performance with pupils in instructional, guidance or counselling terms. The following comments made by teachers in response to the question "Which two aspects of teaching give you most satisfaction?", (Appendix A) illustrate this:

- When pupils show their appreciation of my lesson;
- Pupils' verbal acknowledgement of my work, i.e. "Thank you for the lesson";
- "If you had not worked with us, I would not have passed";
- Seeing pupils pass and obtain good marks in tests and examinations;
- Invigorating class discussions with full participation of all pupils;
- When pupils see you as someone whom they can trust, talk to and confide in;
- Getting my pupils to understand the lesson being taught;
- Having a pupil remember me years later when he/she has left school.

An analysis of the comments made by teachers in response to Question 15 indicates that teachers' perceptions of success tend to emerge as verbal and non-verbal expressions of enthusiasm, appreciation and gratitude by pupils, as well as good results achieved by them in tests and examinations. Blase (1982:106) refers to the former type of positive feedback as "soft data" and the latter type as "hard data".

These findings in respect of teacher satisfaction are supported by those of Farber (1984), Galloway et al. (1985), Freeman (1986) and Trendall (1989), viz., that teachers tend to derive satisfaction more in the interpersonal realm, especially with pupils and selected colleagues.

Teachers' responses to Question 16 in respect of those aspects of teaching which give them least satisfaction were more wide ranging and complex. These sources of dissatisfaction were sorted by the researcher into ten categories (Fig. 5.5).

These categories included the following subcategories :

1. Excessive paperwork : record-keeping and clerical work.
2. Administration and aspects of school climate : negative attitudes of principal and management, excessive demands by superiors, bureaucracy and red tape, not being treated as a professional, too much prescription, insufficient facilities and resources, and time constraints.



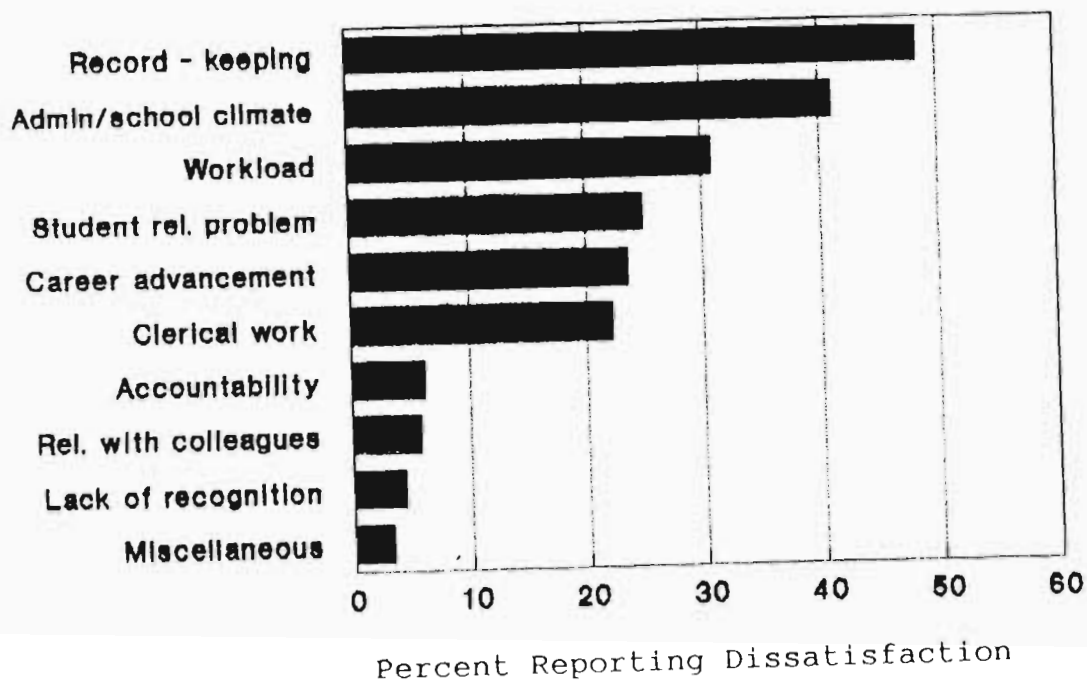


Fig. 5.5 : ASPECTS OF THE JOB WHICH GIVE TEACHERS MOST DISSATISFACTION

3. Excessive workload : extra-and co-curricular responsibilities, excessive marking, serving relief, teaching large classes, unfair distribution of duties, and taking schoolwork home.
4. Career advancement prospects : especially with regard to the systems of evaluation, supervision, merit awards, promotion and salary.
5. Student-related problems : primarily negative attitudes of pupils to schoolwork and homework; and discipline.

6. Accountability especially for pupils' results and discipline.
7. Relationship with other teachers : this includes perceived conflict or a lack of co-operation, incompetence or irresponsibility, negative attitude.
8. Lack of recognition of teachers' efforts by superiors and others.
9. Miscellaneous : constraints of syllabus and curriculum; political interference.

From the above it is obvious that the teachers surveyed had a wide range of concerns. Record-keeping is clearly an important issue as 48% of the group perceived this as being a source of great dissatisfaction, followed closely by aspects of administration and school climate. Excessive workload was mentioned by about a third of the sample, while career advancement prospects, student-related problems, and clerical work were mentioned by about a quarter of the sample. The rest of the categories polled under 10%. It was expected that a number of sources of dissatisfaction would be reported less often for the following reasons :

1. Teachers in the study were limited to mentioning only two sources of dissatisfaction each; and
2. A number of the important sources of dissatisfaction were already addressed in Questions 10 and 11 of the Teacher-Occupational Inventory. These related to the task-based, situation-based and role-based sources of stress.

It is worth noting that excessive paperwork was ranked sixth in the list of twenty stressors reported earlier in this study. It was also identified as the most important source of stress by 57% of the teachers interviewed. In order to determine whether record-keeping or clerical work was the greater problem, the researcher analysed these two items separately. Overall, the results show that record-keeping is a greater source of dissatisfaction (Fig. 5.5).

A further analysis was undertaken to identify specifically which sex and rank subgroups perceived excessive paperwork as being particularly irksome and stressful. This revealed the following information :

TABLE 5.11

SEX, RANK AND EXCESSIVE PAPERWORK AS A SOURCE OF DISSATISFACTION

	RECORD-KEEPING	CLERICAL WORK
TOTAL (N = 360)	48,3%	22,2%
<u>SEX</u>		
Males (N = 180)	48,3%	18,3%
Females (N = 180)	48,3%	26,1%
<u>RANK</u>		
Level 1 Teachers (N = 300)	51,0%	23,3%
HOD's (N = 60)	35,0%	16,7%

The data in Table 5.11 show that a substantial number of teachers find record-keeping very stressful. An equal number of male and female teachers registered their dissatisfaction. With regard to clerical work, more female than male teachers find it particularly bothersome.

When viewed in terms of rank, the data show that significantly more Level 1 Teachers than HOD's found both record-keeping and clerical work to be an important source of dissatisfaction. One male Level 1 teacher expressed his frustrations as follows :

*"The aspect of teaching which makes me most unhappy is record-keeping and clerical work that becomes an end in itself and which is used as the most important criterion for evaluating teaching. Very often this is hypocritical and done merely to satisfy criteria, while actual teaching is of poor quality".*

Excessive paperwork also featured as an important stressor in studies by Blase (1986:29), Farber (1984) and Freeman (1986:12).

It would appear that record-keeping and clerical work is potentially stressful since it requires extra work on the part of teachers. It substantially reduces the time that teachers can delegate to the actual task of teaching, and minimizes the opportunity for positive feedback from pupils. Often teachers are forced to shorten the time they formerly allocated to instruction, planning, and evaluation in order to complete paperwork duties (Blase, 1986; Robison, 1980).

In overall terms, it would appear that the results relating to satisfaction and dissatisfaction are consistent with Herzberg's two-factor theory of job satisfaction as well as

with the findings of Galloway and his associates (1985). Frequently mentioned sources of satisfaction seem to come from intrinsic aspects of teaching which, presumably, meet the teacher's need for achievement and success. On the other hand, the majority of the sources of dissatisfaction mentioned relate to working conditions and other factors which appear to reduce the teacher's sense of self-esteem.

Related to the above aspects of satisfaction and dissatisfaction, the teachers in the sample were asked an additional question *"How likely is it that you will still be a school teacher in ten years' time?"* (Question 17). The aim here was to obtain a measure of intention to leave teaching which, like satisfaction, is an important response correlate of teacher stress. Responses were rated on a four-point scale labelled *"Very Unlikely"*, *"Unlikely"*, *"Not sure"* and *"Very Likely"*, and were scored in reverse, i.e. 4 to 1.

Table 5.12 gives the distribution of responses for the total sample and subgroups.

The statistics in Table 5.12 show that the teachers surveyed appeared to be greatly divided in their responses on this issue. What is immediately noticeable is the large percentage of teachers who are either unsure (40%) or are unlikely to remain in the teaching profession (37,5%), while less than a quarter (22,5%) say they would very likely still

be teaching in ten years' time. These figures are much higher than those reported by Kyriacou and Sutcliffe (1979a).

TABLE 5.12

"HOW LIKELY IS IT THAT YOU WILL STILL BE A SCHOOL TEACHER IN  
TEN YEARS' TIME?" : DISTRIBUTION OF RESPONSES FOR THE TOTAL  
SAMPLE AND SUBSAMPLES

DEMOGRAPHIC CHARACTERISTICS	N	VERY UNLIKELY/ UNLIKELY %	NOT SURE %	VERY LIKELY %
All Teachers	360	37,5	40,0	22,5
<u>SEX</u>				
Male	180	32,8	40,0	27,2
Female	180	42,2	40,0	17,8
<u>MARITAL STATUS</u>				
Married	274	40,0	40,1	25,9
Single	86	48,8	39,5	11,6
<u>AGE</u>				
20-24 years	30	43,3	40,0	16,7
25-29 years	135	42,2	45,2	12,6
30-39 years	118	37,3	41,5	21,2
40 years or more	77	27,3	28,6	44,2
<u>TEACHING EXPERIENCE</u>				
3 years or less	54	50,0	37,0	13,0
4-10 years	164	36,6	47,5	15,9
11-20 years	96	39,6	35,4	25,0
21 years or more	46	21,7	26,1	52,2
<u>QUALIFICATION</u>				
Diplomates	136	38,2	39,0	22,8
Graduates	116	41,4	47,4	11,2
Postgraduates	108	32,4	33,3	34,3
<u>POSITION HELD IN SCHOOL</u>				
Level 1 Teacher	300	39,7	42,3	18,0
Head of Department	60	26,7	28,3	45,0

These results are not surprising when one considers the high incidence of teachers (54%) who find teaching very stressful. The findings may also be a reflection of the uncertainty and insecurity which currently prevails not only in the teaching profession, but in the country generally.

A closer examination of the statistics for the six biographic subgroups reveal trends similar to those for the total sample (Table 5.13).  $\chi^2$  tests applied to the data show that "intention to leave teaching" was the only item in which all six demographic variables emerged as significant moderators of teachers' perceptions of this issue. Significant differences were obtained in respect of sex ( $p < 0,05$ ); and marital status, age, teaching experience, qualification and rank ( $p < 0,01$ ).

The data for the teacher sex subgroups reveal that although a large proportion of male and female teachers are unsure about remaining in the profession (40% in each subgroup), significantly more female teachers, compared to males (70,4% vs 54,6%) indicated that they are unlikely to remain in teaching ( $\chi^2 = 5,71$ ). A probable reason for this finding is that since males are generally the breadwinners with greater family commitments, there may be greater compulsion for them to continue in teaching. This may not be the case with female teachers. Also, for many women, their futures in teaching may be contingent on relationships outside work, for example, marriage, motherhood, and changes in their husbands' careers.

A significantly greater number of single teachers, compared to married teachers (81% vs 57%), reported that they are unlikely to remain in the profession in ten year's time ( $\chi^2 = 9,75$ ). It may be that the single teachers in the sample are generally the younger teachers who have hopes of more attractive jobs in the future. Whether these will be realized, however, is conjectural. Married teachers, on the other hand, are probably older, have family commitments, and are already well entrenched as teachers. As a result they have to view the situation more realistically. Leaving the profession may not be a feasible option as this may entail losing their fringe benefits such as a housing subsidy, pension and medical aid.

When one views the data in terms of teaching experience, one notices a certain trend emerging (Fig. 5.6).

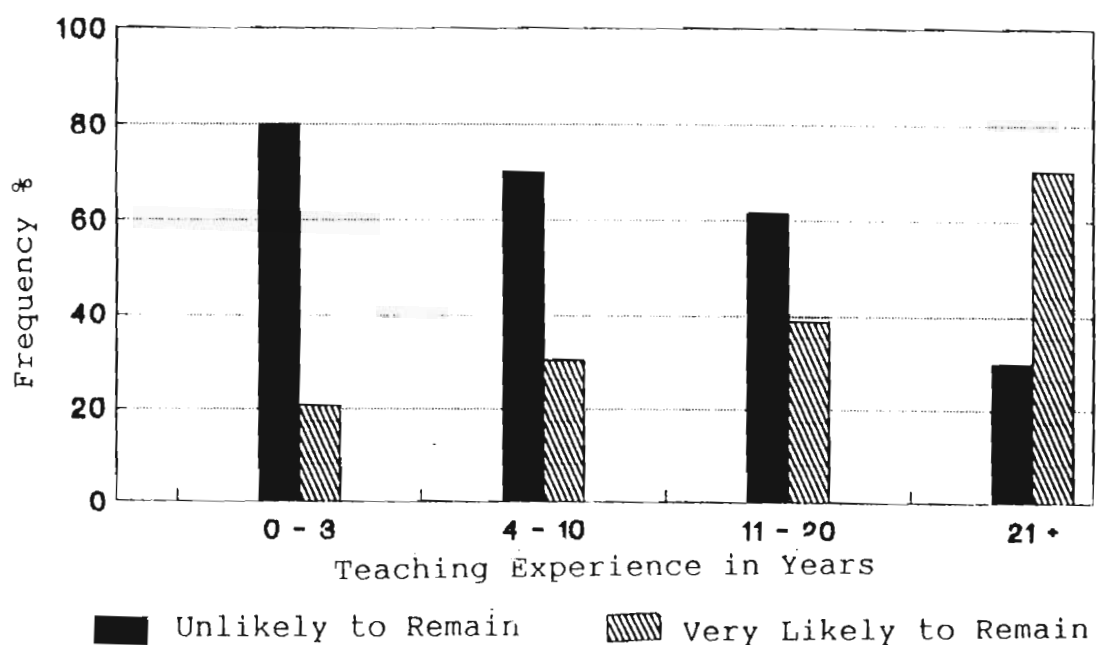


Fig. 5.6 : "INTENTION TO LEAVE TEACHING : VARIATIONS IN DISTRIBUTION OF RESPONSES ACCORDING TO LENGTH OF TEACHING EXPERIENCE"



Intention to leave teaching tends to decrease with increasing experience. The differences between the various subgroups are highly significant ( $\chi^2 = 22,01$ ). Since beginning and other younger teachers may not yet have become established in following a set routine in teaching, it may be easier for them to opt out of teaching if they so desire. Older and more experienced teachers, on the other hand, may have become more entrenched in the profession. In any case, given the current economic climate in South Africa, the prospect of finding another job would be difficult .

The trend in the age subgroups is very similar to the results obtained in the teaching experience categories ( $\chi^2 = 21,31$ ). In this respect it must be noted that seven of the nine teachers over the age of 50 years in the sample indicated that they were unlikely or not sure of remaining in the profession. It may be assumed that these teachers would retire within the next ten years.

On the qualification variable, the results also show highly significant variations with 63% of the diplomates and 79% of the graduates indicating that they were less likely to remain in teaching. Only 49% of postgraduates, in contrast, held the same view ( $\chi^2 = 12,75$ ). Graduates may perceive their higher qualification as standing them in good stead for achieving better job prospects in fields other than

teaching. A large number of postgraduates, on the other hand, are senior teachers and HOD's who may have been in the profession too long to want to change.

In the light of the above findings, it was not surprising to find that significantly more Level 1 teachers than HOD's (69% vs 37%) indicated that they were less likely to continue teaching. In contrast, significantly more HOD's than Level 1 teachers (63% vs 31%) indicated their desire to remain in the teaching profession ( $\chi^2 = 14,65$ ).

In overall terms, the finding that intention to leave teaching is greater for female, younger and less experienced teachers is consistent with the findings of Charters (1970), Pratt (1977), Taylor and Dale (1971) which are reported by Kyriacou and Sutcliffe (1979a).

To summarise, from the above discussion of satisfaction/dissatisfaction in teaching and intention to leave teaching, it would appear that although teachers seem to derive a great deal of satisfaction from certain aspects of teaching (especially the intrinsic ones), there are other aspects of teaching (particularly in respect of working conditions) which may not be attractive enough to make the teacher want to remain in the profession.

The conclusions and educational implications of the findings of this study as well as the recommendations will be presented in the next chapter.

## CHAPTER SIX

### DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

#### 6.1 INTRODUCTION

In this chapter some of the more important findings of this study will be brought together and certain educational implications will be discussed and recommendations made.

The material presented in this chapter is a combination of data obtained from the present research study, a review of the literature, interviews, discussions with educators, colleagues and other knowledgeable people, as well as first-hand observations.

#### 6.2 DISCUSSION

A logical starting point for the discussion is a brief review of some of the more important findings and conclusions of this study.

In Chapter One, eight research problems were formulated. Question One related to the overall incidence of self-reported stress among Indian secondary teachers while Question Two sought to determine whether any relationships existed between the incidence of teacher stress and the

following six demographic characteristics : sex, marital status, age, teaching experience, academic qualifications, and position held in school.

Over half (54% ) of the Indian secondary teachers surveyed perceived their job as being very stressful. This is not unique to Indian teachers. Numerous overseas researchers cited in the earlier chapters also reported the prevalence of high levels of stress in their samples of teachers (Kyriacou & Sutcliffe, 1978b, 1979; Otto, 1986).

No fundamental differences in teachers' perceptions of overall work stress were found in respect of the following sub-groups; males and females, younger and older teachers, less experienced and more experienced teachers, diplomates and graduates, and Level 1 teachers and HOD's. This indicates that the majority of teachers, irrespective of their demographic differences, perceive their work situation in a similar way, i.e. as one that is very stressful.

Marital status was the only demographic variable which appeared to influence secondary teachers' perceptions of overall work stress. Significantly more married teachers than single teachers perceive teaching to be "very stressful". This is probably due to the fact that married teachers are generally subjected to more, and conflicting demands, because of their home, family and teaching roles.

Nevertheless the finding that such a large segment of the Indian teaching fraternity see their work environment as stressful is disturbing since this could have a detrimental effect on their efficiency and productivity in the school setting. Everything possible should therefore be done to identify the most important stressors within the teaching profession and to take whatever steps are required to eliminate them or neutralize their harmful effects. The findings of this study, therefore, have considerable relevance for school administrators, policy makers and teacher-educators.

A rank-order analysis of various stress-related items indicates that the dissatisfaction perceived by the sample were those related to merit notches, promotion, evaluation and salary. These relate to the working conditions of teachers rather than to the actual job of teaching. As such, these problems are largely beyond the control of teachers.

The statistics show that 70% of the present sample and 80% of Level 1 male and female teachers fall within the 25-39 year age group. This is a time when teachers are often preoccupied with thoughts of acquiring good evaluation assessments, merit awards, promotion and salary increases. Tests of significance conducted on the demographic subgroups relating to age and teaching experience, as well as the sentiments expressed by teachers during the interviews, confirm this observation.

An interesting point that emerged during the interviews was the fact that, because of the difficulty in obtaining increments through merit notches and promotions, teachers turned to studies to upgrade their salaries through improved qualification notches. Thirty seven percent of the sample (34% of whom were Level 1 teachers) were engaged in part-time studies. With this considerable investment of time and effort in studies, comes a greater expectancy of rewards. In cases where these are not forthcoming frustration and stress set in. Teachers complain that no matter how hard they work, the rewards in terms of recognition, advancement, or appreciation hardly follow. Farber (1983:6) refers to this feeling as one of "inconsequentiality". It may be exemplified by the comment of a demotivated teacher : "Why should I continue to try for a merit award or promotion when I know I will not be successful anyway?" Of the 300 Level 1 teachers who participated in this study only 12,3% had received one or more merit notches.

Evidence of teachers' anger at the lack of career development opportunities was evident in their rejection, in October 1990, of the system of evaluation used for determining promotions and the awarding of merit notches. Moreover, since 1991, Indian teachers refused to allow Superintendents of Education to evaluate or supervise their work, and have exerted considerable pressure on their colleagues not to apply for merit awards. Many educationists view these events as external expressions of

dissatisfaction arising out of strong feelings of "inconsequentiality". The mobilisation of teachers through mass meetings, protest marches and strikes are modelled along similar actions which have taken place in the wider political context in South Africa.

The data in the present study also reveal the complex and problematic nature of stress arising from interference with teachers' valuable instructional time. This interference may be direct or indirect, requiring extra time, effort and energy on the part of the teacher and contributing to an overload both quantitatively and qualitatively. Examples of important stressors identified in this study are student apathy, parental lack of interest and non-support, teaching pupils of widely divergent abilities, lack of time for preparation and marking, excessive paperwork, non-teaching duties and serving relief.

Surprisingly, "student discipline problems" polled a relatively low seventeenth in the rank order of stressors. In addition, this variable did not feature in the nine-item cluster relating to "Time and workload pressures" and "Student-related pressures". This suggests that when teachers are asked if discipline is a problem they readily admit that it is. However, when they are asked to rank-order it along with many other work-related problems they rank it low down. This contradiction needs to be considered in the light of one or more of the following contexts:

- \* that Indian secondary teachers consider disciplinary problems to be an integral part of teaching universally- i.e. as one of the hazards of the job - and, therefore, not qualifying for any special kind of mention;
- \* that Indian pupils come from a relatively stable and progressive background and are generally not disruptive to the point of becoming uncontrollable;
- \* that school management and administration in Indian secondary schools is strong enough to keep pupil misbehaviour in check;

A problem which teachers find difficult to accept since it interferes significantly with their main task of imparting knowledge, is the lack of co-operation on the part of parents and pupils.

Much of this lack of co-operation, according to the interviewees, may be due to the rapid changes taking place in the lifestyle of the Indian community, e.g. the breakdown of the joint family system and its traditional values; industrialization and the increased employment of Indian women with a consequent reduction in the amount of time mothers spend with their children; an increase in socio-economically linked problems and a deterioration in standards of living; social problems, permissiveness, drug and alcohol abuse, increased violence, physical abuse, and



broken homes. It is beyond the scope of this study to delve more deeply into a discussion of each of these important areas.

Another interesting finding that emerged from this study is the fact that sources of stress can be influenced by seasonal pressure periods and can, therefore, change over time within the same context. In this study, for instance, record keeping/clerical work was ranked sixth in the list of the twenty task- and situation-based stressors. During the interviews, this emerged as the prime stressor, having been reported by 57% of the interviewees. This discrepancy in the results can be explained by the fact that the interviews were conducted immediately after the half-yearly examinations in June/July 1991. This is a time when teachers are more pressured by extra marking and paperwork.

Demographic variables are, to a greater or lesser extent, influential in mediating teachers' perceptions of the factors causing stress. In respect of sex, for instance, male teachers rated the present system of evaluation as a greater source of stress than did female teachers. Female teachers rated "insufficient opportunity for participation in decision-making" as a source of stress more frequently than did males.

In respect of age and length of teaching experience, there was a shift in the sources of concern among teachers during different phases of their career, indicating a developmental

trend. Beginning teachers' anxieties related more to actual teaching tasks and class management skills while those of more experienced teachers focussed more on the need for reward and recognition. Student discipline problems caused greater concern among the younger, less experienced teachers, and more especially among beginning teachers with 0-3 years' experience. The systems of evaluation and promotion, on the other hand, although perceived as being very stressful by teachers of all age and experience groups, seemed to create particular anxiety among teachers in the 25-39 years' age range. Inadequate teaching facilities and resources seemed to create most stress for teachers in the 30-39 years' age range.

Stress as a result of inadequate salary as well as insufficient opportunity for decision-making was felt most frequently and intensely by Level 1 teachers in the 20-39 years' age group and 0-20 years' teaching experience. In contrast, older teachers aged 40+ years and HOD's perceived both these factors to be somewhat less stressful. It may be that because of their seniority and status, they are in a more favourable position in respect of both factors.

Marital status and qualification were associated with only one stress factor each. Married teachers reported experiencing more stress as a result of the system of evaluation ( $\chi^2=5,60$ ;  $p<0,05$ ), while more diplomates and

graduates showed greater concern about being held accountable for pupils' performance than post graduates ( $\chi^2=10,06$ ;  $p<0,01$ ).

The possible reasons for these findings have been discussed at great length in Chapter Four.

Overall, the results of this study showed that age and teaching experience had a greater impact in mediating teachers' perceptions of the task- and situation-based stressors than did sex, marital status, qualification or rank.

The total sample of teachers surveyed identified the following four role-related situations as contributing most to their feelings of perceived stress :-

1. the amount of work adversely affecting the quality of the work produced;
2. being compelled to perform duties that appear to have little value;
3. having too heavy a workload; and
4. uncertainty about how superiors evaluate their teaching.

The overall picture which emerges from the present data indicates that it is generally the relatively younger, less experienced Level 1 teachers who appear to be suffering from greater levels of role stress as a result of certain

intrinsic aspects of their task and role. In this respect highly significant results were obtained for the following stress factors : (1) the volume and variety of tasks that teachers are expected to perform and the adverse effect this has on the quality of work they can produce because of the limited time at their disposal; (2) being compelled to perform duties that appear to them to have little value; (3) having too heavy a workload; and (4) uncertainty about how superiors evaluate their teaching.

The results also suggest that the increased stress experienced by HOD's in their interpersonal relationships may be the result of their many and conflicting role functions. In addition to his/her teaching and professional commitments, the HOD also has administrative and pastoral roles. Apart from providing support for the members of his/her department, he/she acts as an intermediary and negotiator between his/her own department, the principal and others in the school. Because of these numerous demands, he/she may become more vulnerable to the stresses that all this interaction generates.

In overall terms, these results provide evidence that role stress in the form of role overload, role conflict and role ambiguity, is widespread among the secondary teachers surveyed.

Another important finding in this study was the degree to which self-reported work stress was reflected in psychological, physiological and behavioural complaints/symptoms. Only 3,6% of the 360 teachers surveyed reported experiencing no negative symptoms on the twelve item symptoms checklist (Question 11). On the other hand, one-third (33,3%) reported symptom scores of six or more.

The most frequently mentioned symptoms were the following : feelings of exhaustion (reported by 83,6% of the sample); frustration (76,9%); "tension" headaches (60,8%) and anxiety (56,7%). These findings are very much in line with those reported by Dunham (1977, 1978, 1980, 1984), Kyriacou and Sutcliffe (1978b) Milstein et al. (1984), Blase (1986) and Otto (1986).

Additional qualitative data was obtained through the interviews. The most common negative stress reactions were found to be as follows :

- resentment and anger towards superiors;
- enforcing harsh discipline, becoming less tolerant and caring, and curtailing pupils' freedom;
- irritability; displaced aggression and unsociability towards family members; and
- the reduction of contacts with people outside school as well as the inability to relax in the company of friends.

In general, these findings appear to support those of Blase (1986:33), viz. that teachers experience strong negative feelings, especially anger, towards others in a stress-laden work environment. The vital two-way interaction between the teacher and pupils is depreciated.

A further analysis of the symptoms displayed by the teachers revealed not only similarities, but important demographic differences in teachers' experience of overall and specific symptoms of stress. These have been discussed exhaustively in Chapter Five. Results show that all six variables seem to influence how teachers react to stress. However, an interesting finding was that male teachers as a group reported more symptoms than female teachers (827 vs 811 symptoms). This finding was unexpected especially in view of the past findings of researchers such as Otto (1986), and the fact that society conditions men to conceal their feelings. However, this study suggests that Indian male teachers do not shy away from admitting that they experience stress.

Again, while both male and female teachers identified "exhaustion" and "frustration" as the two most common symptoms experienced (Table 5.1), more females reported "exhaustion" (89% vs 81%), "tension headaches" (68% vs 54%), and "feeling tearful" (33% vs 9%). The latter finding is consistent with that of Kyriacou and Sutcliffe (1978b : 166). Travers and Cooper (1991:17) maintain that female teachers may use these three symptoms as coping mechanisms.

The differences may be explained by the fact that culture may have an important influence on how men and women express stress. This may also explain why, although both sex subgroups identified "increased smoking", "increased use of tranquilizers" and "increased consumption of alcohol" as the least common symptoms of stress, significantly more Indian male teachers reported engaging in these behaviours.

Overall results for the GHQ-12 revealed similar trends to the 12-item symptoms checklist. At least one-third (35%) of the 360 teachers in the sample reported experiencing six or more symptoms and therefore fell in the "high stress" category.

A further analysis of the data show that five of the six most common symptoms reported by the sample of 360 teachers relate to the stress symptom cluster labelled "anxiety and unhappiness". More female than male teachers featured in the "high stress" range of the GHQ-12 (36,7% vs 32,8%) and overall, they had a higher symptom mean score than males. These findings suggest that women teachers as a group experience greater psychological stress than male teachers.

The results in terms of rank suggest that HOD's as a group may be experiencing considerable anxiety and role stress which could impair their functioning in the school system. The following sentiments expressed by a male HOD with 17 years' experience gives some indication of the problems confronting HOD's in the school situation :

*"I think HOD's are the most neglected people in the school. In the present climate, principals have adopted a patronising attitude towards the Level 1 teachers. It is the HOD's who have to bear the brunt of everything. They are the middle people between Upper Administration and Level 1 teachers. They are isolated because they have no one to turn to if they are stressed. I mean, I cannot tell a Level 1 teacher*

*'Look, I'm feeling very frustrated'. Since I am a promotion-post holder, I cannot admit to feeling stressed because this would be misinterpreted as a sign of weakness".*

Considered overall, the results obtained from the analysis of stress supports other data and reinforces the view that teaching in an Indian secondary school is stressful. The fact that at least one-third of the secondary teachers score six points or more in both Questions 11 and 14 may be seen as a warning sign that such teachers are "at risk" of developing more serious health problems and therefore need assistance.

The results relating to coping are discussed comprehensively in Chapter Five. The three most frequently used coping actions used by Indian secondary school teachers were : "to keep things in perspective"; "let people know exactly where you stand" and "express feelings and frustrations to others".



The two least frequently used coping actions were : "take time off from school to recover" and "take no action and carry on as usual in the hope that the tension wears off". Results of tests of significance show that all six demographic variables, to a greater or lesser extent, have an impact on the type of coping technique used by teachers in some of the subgroups. Of these, length of teaching experience emerged as a significant variable in mediating teachers' choice of at least four coping actions.

Results for the six subgroups show, as Borg and Falzon (1990) found in their study, that both sexes try to cope with occupational stress in quite different ways. In this study they differed in ten out of twelve coping actions. Female teachers appear to be more disposed than their male colleagues to "expressing feelings and frustrations to others", and "trying to get advice and suggestions from some person". According to Otto (1986:140) the inclination towards expressiveness among women can have protective value, especially when it leads to help and support from others.

Male teachers in this study resorted more often than did females to reducing tension through physical activity and becoming involved in some recreation or hobby. Some of the possible reasons for these sex differences given by interviewees were that Indian males are generally more outgoing by nature, and that they have more time, energy and greater access to facilities than do females. Indian women,

on the other hand, may have fewer opportunities of reducing their stress by means of physical activity, recreation or hobbies. Moreover, they are more constrained by social commitments and demands such as family, motherhood, work and household chores.

The developmental trend notion espoused by Fuller (1969) seems to be clearly discernable in the associations between the demographic variables marital status, teaching experience, age and qualification and certain coping modes.

Results for the marital status subgroups show that significantly more single than married teachers "try to get advice from some person as well as" take time off from school to recover". These results may be explained by the fact that the generally younger, less experienced single teachers tend to be more uninhibited in seeking pastoral care from their more senior and experienced colleagues. Furthermore, the professional and personal demands made on single teachers, especially those in the 0-3 year teaching experience category, may generate a great deal of stress among these teachers; hence they may absent (withdraw) themselves from school more often in an attempt to recover. Woods (1989:93) refers to absenteeism as one of the "survival strategies" used by teachers.

Length of teaching experience (and age) appeared to be a significant moderator of four coping modes : "express feelings and frustrations to others", "get advice and

suggestions from some person", "become involved in some recreation or hobby" and "reduce tension through physical activity". Again, there is a trend for the relatively younger, less experienced, developing teachers to resort more often to expressing their feelings and frustrations to others as well as getting advice and suggestions from others. Furthermore, 60% of beginning teachers with 0-3 years' experience reported that they NEVER resorted to reducing tension by engaging in physical activity, while only 44% reported that they were involved in some recreation or hobby. Interview data suggest that this is often the result of weariness resulting from greater professional and personal adjustment demands made on beginning teachers. This observation is supported by the fact that 87% of beginning teachers aged 20-24 years reported "exhaustion" as their most important stress symptom. In this regard Otto states : "Stress and exhaustion make it less likely that people will engage in physical activity" (1982:182).

Results in terms of qualification indicate that postgraduates and graduates "try to see the humour of the situation" significantly more often than the lesser qualified diplomates. This may be accounted for by the fact that a significant proportion of diplomates in this study (53%) were beginning teachers in the 20-24 year age group. In line with Fuller's theory, these inexperienced teachers tend to focus more on their adequacy as teachers and the accomplishment of new tasks in teaching. Also, because of the greater demands on these teachers, they presumably

experience greater stress. Conversely, graduates and post-graduates many have developed greater confidence in handling matters related to their job by virtue of their higher qualification, greater experience and maturity.

In the light of the above findings, the results in terms of rank were anticipated. More Level 1 teachers than HOD's (86% vs 67%) express their feelings and frustrations to others. As stated earlier, HOD's may not readily express their feelings and frustration to others lest this is construed as a sign of weakness and inappropriate for people of their status.

In overall terms, this investigation has shown that Indian secondary teachers use a range of coping actions to reduce the impact of work stress. The findings are broadly consistent with those of Kyriacou (1980b), Dunham (1980; 1984), and Borg and Falzon (1990).

Finally, this study sought to identify those aspects of teaching which are perceived by teachers as contributing most to their overall satisfaction and overall dissatisfaction with teaching as an occupation.

It was found that teachers derive most of their job satisfaction from the intrinsic factors. They value the positive, rewarding experiences gained from their interactions with pupils. When these rewards are not forthcoming, teachers complain of a loss of confidence,

demotivation, diminished performance and greater stress. Excessive paper work was identified here as the most important source of dissatisfaction. It substantially reduces the time that teachers can devote to the actual task of teaching. It would seem that satisfaction with work, for teachers, can have a protective value by acting as a psychological "buffer", thereby reducing some of the detrimental effects of occupational stress.

Another finding that emerged from this study was that less than a quarter of the respondents indicated that they saw themselves remaining in the teaching profession in ten years' time.

Overall, this study suggests that although teachers appear to derive a great deal of satisfaction from the intrinsic aspects of teaching, there are other aspects, particularly in respect of working conditions, which may not be attractive enough to make the teacher want to remain in the profession. This should be of great concern to educational administrators and an important signal to them to do all in their power to attend to teachers' grievances timeously.

### 6.3 LIMITATIONS

The results of this study must be interpreted against the background of certain limitations.

A major limitation concerns the cross-sectional nature of this study. The empirical data only provide a picture of stress among Indian secondary teachers at a particular point in time (September 1990). With the changes that have taken place in the socio-political scene in South Africa since then, it is not known how these teachers' perceptions have changed. For a more comprehensive understanding of the stress phenomenon, studies need to investigate teachers' perceptions of their work over a number of years. Longitudinal studies would provide greater insight into the fluctuations that probably occur and would also furnish data on the interrelationships between teacher stress and job satisfaction.

A further limitation is the fact that this study was confined to Indian secondary schools in the Greater Durban area. As noted earlier, school problems may frequently differ from setting to setting. It would be interesting, for instance, to determine whether stressors such as lack of co-operation from parents and pupils, which were found to be important in this sample, might also prove, to be important in rural schools - or perhaps in primary schools and in schools belonging to the other population groups.

Thirdly, the self-administered questionnaires and in-depth interviews used in this study leave room for distortion through faking, bias or forgetting. However, every precaution was taken to minimise such distortions.

Fourthly, more exhaustive instruments could have been used. For example, on the basis of the results obtained in the first pilot study, it was decided to use the 12-item version of the GHQ rather than the more comprehensive GHQ-30. Changes such as these were made to prevent the Teacher-Occupational Inventory becoming too long and too cumbersome for the researcher to handle and analyse.

Other limitations concern the interview procedure. Because of time and resource constraints, only a limited number of teachers could be interviewed.

In spite of these limitations this study has provided reliable empirical findings in an area in which speculation has been rife for several years. It also provides valuable pointers to further research.

#### **6.4 STRATEGIES TO ALLEVIATE TEACHER STRESS :** **RECOMMENDATIONS**

The results of this study confirm that occupational stress is a serious problem for a large number of Indian secondary teachers. Specific task, situational (environmental) and role characteristics in teaching have been consistently identified by them as sources of stress.

Developing meaningful solutions for the problem of teacher stress is a very complex issue. What follows in this section is not a blueprint for any easy solutions, but an outline of needs and possible strategies for tackling the problem.

The interactional model of stress emphasises the influence of both the individual and the environment in stress and coping. Any strategies for reducing stress should therefore ideally attempt to intervene at both levels. In the light of this, two basic questions which must be asked are :

1. What can be done to strengthen individual coping power?  
and
2. What can be done to change stress-producing conditions  
in the environment?.

In order to deal more effectively with teacher stress, a multi-dimensional approach is required. Each of the following levels, or groups, need to consider specific actions to deal with the problem :

- individual teachers themselves;
- school administrators;
- state departments of education;
- teacher training institutions; and
- the wider society.



#### 6.4.1 INDIVIDUAL STRATEGIES

Strategies relating to individuals are basically means of strengthening personal resistance to potentially stressful conditions by changing his/her perception or experience of stress. The strategies employed will vary from person to person.

Bringing about desired change in an individual is difficult because it involves change in human attitudes and behaviour. A holistic approach to stress management assumes that the problem needs to be approached on several fronts simultaneously – cognitive, physiological and behavioural. This approach advocates that a teacher should be trained to take personal responsibility for developing a stress management programme that fits in with his/her unique situation and it must be incorporated into one's ongoing lifestyle.

Colleges and universities responsible for teacher education need to prepare prospective teachers adequately for the realities of teaching so that they do not have false expectations of the job and what they can achieve. They need to be informed about the uncertainties in teaching and to accept this as an inherent feature of the job. They need to be informed about stress and burnout and be aware of the negative effects stress can have on themselves, their students, and their teaching performance. They also need to

be aware of the ways in which schools have been affected by social and cultural changes, including changes in student attitudes to school life, behavioural problems and violence.

Preservice and inservice programmes designed to provide teachers with coping strategies for handling job-related frustrations and tensions need to be instituted. Personal development programmes can assist teachers to engage in effective exercise programmes, hobbies and interests outside the work environment, and to practice relaxation techniques. They could also be taught professional skills and competencies to meet the demands of being a teacher. These include time-management, organizational, conflict-management, problem-solving, assertiveness and interpersonal skills, as well as strategies for dealing with student behavioural problems. Furthermore, the teacher-as-counsellor concept should be developed whereby teachers are given training<sup>^</sup> acquiring skills to diagnose causes, to prescribe alternatives and to evaluate results.

#### 6.4.2 ORGANIZATIONAL STRATEGIES

Organizational strategies for alleviating teacher stress are aimed at changing some aspect of the organizational environment. These strategies will be discussed according to the five organizationally-based categories developed by Cooper (1976). In this discussion, however, the categories have been prioritised in the order in which they were identified by the sample as contributing most frequently to

their perceived stress, i.e. (1) career development issues; (2) factors intrinsic to the job; (3) role in the organization; (4) organizational structure and climate; and (5) interpersonal relationships.

### 1. Career Development Issues

The findings of the present study indicate that poor career development prospects and lack of rewards are serious problems that need to be addressed. Specifically, the four issues which were perceived by the sample as causing most stress are in rank order, the following : (1) the system of awarding merit notches; (2) the system of promotion; (3) the system of evaluation; and (4) salary.

In order to alleviate stress and increase career satisfaction, there is a need to restructure the reward system so that teachers are able to fulfil their professional needs. The organisational structure and the work activity need to be organised in such a way that teachers can achieve their goals and be rewarded for their accomplishments, both extrinsically and intrinsically.

Several issues related to reward systems can be identified with respect to teacher stress. First, the teachers generally feel that their salary is low compared to that of other professionals. Also, being a good teacher does not necessarily mean one would be rewarded with a merit notch or promotion. In order to advance on the career ladder,

teachers are required to have both classroom teaching and administrative experience. Added to this problem is the fact that there are too few opportunities for promotion within the teaching profession. With regard to evaluation ratings and merit notches, the most important concerns seem to revolve around the extreme difficulty in achieving good evaluation ratings and merit awards as well as the perceived unfair and arbitrary manner of their application.

The following factors, inter alia, need to be borne in mind when implementing strategies for improvement :

a) Salary

- This needs to be linked to the inflation rate so that teachers' salaries do not lag too far behind;
- There is need to have built into the salary structure some mechanism whereby teachers who are not promoted are compensated;
- Teachers who have reached the ceiling of the "F" grade should not be left to stagnate on their maximum notch.

b) Promotion

- There is a need for clear, consistent criteria and standards regarding the promotion of teachers;
- To keep good teachers in the classroom, a two-stream system of promotion can be implemented - a teaching stream as well as an administration

stream - whereby teachers who prefer to remain as classroom teachers could eventually earn the same salary as that of principals.

c) Evaluation and Merit awards

- Administrators and other superiors should provide honest feedback and constructive criticism. These should be specific and directly related to attainable improvements.
- Conditions should be created so that there is a reduction in the excessive amount of competition that exists at present. The aim should be to increase the feeling of collegiality among staff members.

Rewards in both tangible and intangible forms provided by the educational authorities can do a great deal to increase teachers' feelings of significance and importance, increase their motivation and provide them with opportunities for psychological growth. When these needs are satisfied, they would presumably serve as buffers against stress and burnout.

2. FACTORS INTRINSIC TO THE JOB

Other major contributors to stress, according to this study, are related to various task/job characteristics or conditions. Stressors in this regard have been grouped under two categories : " time and workload pressures" and

"student-related pressures". Both these categories are inter-related. Since many teachers suffer from time constraints and pressures they could benefit from learning better time management and organisational skills as well as learning to establish priorities when confronted with a multitude of tasks and expectations.

However, time pressures affecting teachers are also built into the system. They result from role demands which are excessive in terms of available time and staff resources. Consequently, the constant shortage of time interferes with a teacher's ability to relate to students in a personal and caring manner and to deal adequately with their individual problems and learning needs.

To overcome this problem specific job-redesign strategies are suggested. These are related to altering task characteristics which include providing teachers with more time for lesson preparation and marking, reducing unnecessary clerical work and record-keeping, and reducing the size of classes. Such steps may require more staff and increased expenditure. The researcher believes that the advantage that could accrue in the form of a more contented and productive staff would outweigh these disadvantages.

With regard to student-related pressures, greater parental involvement and support on a continuing basis is essential. Parents generally need to maintain more regular contact with the school to monitor their children's progress. Other

strategies could include making the curriculum and syllabi more relevant, as well as the creation of school-parent-student problem-solving structures in which the three parties work together to resolve school-related problems. This team approach to problem-solving broadens the responsibility for student behaviour and performance.

### 3. ROLE IN THE ORGANIZATION

The data in this study indicate that there are many stressors associated with a teacher's role which generate insecurity. The stressors are related to role conflict, role ambiguity and role overload. Level 1 teachers and HOD's for example, expressed concerns about their having an excessive workload and being inadequately trained for carrying out their role-functions effectively. Level 1 teachers, in addition, felt very stressed at having to perform duties that appeared to them to have little value.

Some useful strategies which may reduce role-related difficulties and stress among Level 1 teachers and HOD's include the following:

- Developing clear job descriptions and expectations;
- Involving staff members in the development of realistic organizational and individual goals;
- Effective stress reduction programmes;
- Providing more support and preparation for teachers and HOD's;

- Providing effective staff induction and development programmes for teachers;
- Greater involvement of staff in evaluation processes and the need for honest feedback and constructive criticism from superiors.

#### 4. ORGANIZATIONAL STRUCTURE AND CLIMATE

Stress resulting from organizational structure and climate will vary greatly from school to school depending upon the nature and size of the schools, their location, and the competence and leadership styles of their administrators. Generally, administrators and the education authorities should consider strategies for facilitating a school climate which is humane, supportive and caring.

Specifically, the results of this study suggest a need among teachers for greater consultation and participation in the decision-making process, the provision of adequate teaching facilities and resources, and a better appreciation of their work by parents, the education authorities and the community at large.

An important means of reducing teacher stress may be through the use of a decision-making structure in the school system which allows for and utilizes teacher input, especially in respect of those decisions and policies which have a direct



impact on their work. This would encourage greater autonomy and participation by teachers in their job and would help to increase their sense of professionalism and commitment.

It is also important to take steps to improve the professional image and status of teachers. This can be done by educating the general public about the nature of teachers' work and the kinds of problems experienced in school settings. The link between many of these problems and home conditions need to be highlighted.

When community members have realistic views about teachers' roles and limitations, adopt a sympathetic attitude towards them, and become more involved in the education process, the pressures on teachers would presumably be greatly minimised.

## 5. INTERPERSONAL RELATIONSHIPS

The fact that interpersonal relationships was the least important source of stress in this study, and that expressing feelings and seeking advice were two of the common coping strategies identified by the sample, underscores the importance of sound interpersonal relationships among teachers to combat stress.

Those in positions of authority, in particular, can do much to establish a caring school ethos by developing positive, ongoing and meaningful relationships at all levels within the school system (teacher-pupil, teacher-teacher,

teacher-superior), improving the quality of supervision, and increasing social support (eg. by adopting a team approach to problem solving, and more effective staff induction and development programmes). To this end, a more supportive, problem-solving style of management needs to be developed. Orientation courses for newly appointed principals could help to increase their insight into human dynamics.

Various researchers (e.g. Pines, 1983; Otto, 1986, Freeman, 1986; Payne, 1980; Turner, 1983; and Dunham, 1989) have recommended the utilization of social support systems which help to increase the individual's tolerance for stress by acting as a "buffer" against work-related stress. Such support groups can be instituted both formally and informally in a number of ways. There is evidence to suggest that teacher centers and self-help support groups for teachers are successful in reducing isolation, promoting collegial support, renewing commitment, and increasing teachers' sense of professionalism.

The education authorities have a vital role to play in reducing stress by developing counselling, support and information services for teachers with stress problems, not only for those already in crisis situations, but also as a preventative service. They should also consider strategies, using a long-term structural approach, for improving the school environment.

A phenomenon which emerged since the mid-1980's as a result of declining enrolments has been the constant mobility of principals because of upgrading and downgrading of schools. This has resulted in instability, uncertainty and stress, not only among teachers who have to constantly adapt to new principals each with his own distinctive personality and leadership style, but among principals as well. If principals are to understand the needs of teachers better and if they are to build and develop a school ethos which is caring and supportive, then this mobility must be reduced to a minimum. Research has shown that the supportive behaviour of the principal is even more important than that of co-workers in reducing stress-induced illness among teachers (Dworkin, 1990:16).

An encouraging step recently taken by the Education Department (House of Delegates) is the support it provides principals in the form of workshops and more frequent meetings. This has enabled principals to discuss common problems and share ideas and solutions with other principals.

From the foregoing it is clear that stress is a complex phenomenon and its remediation requires a multi-pronged approach. The problem requires co-operation at every level in the educational hierarchy.

#### 6.4.3 FURTHER RECOMMENDATIONS

The recommendations discussed above relate to strategies dealing with the sources of stress only. Below are further recommendations pertaining to the other aspects of stress that were investigated. These include the incidence of stress, symptoms, coping, satisfaction and dissatisfaction.

- i) The finding that 54% of the teachers surveyed experience very high levels of stress has serious implications. There is therefore an urgent need not only to constantly monitor and evaluate the stress levels of teachers, but to address the problem through appropriate stress management interventions. For this purpose some form of infrastructure needs to be created, perhaps on a regional basis, where teachers are able to get help.
- ii) About one-third of secondary teachers were found to be in danger of developing psychological ill-health. This calls for intervention programmes aimed at helping the teacher to learn appropriate coping skills to alleviate stress. Many sources of stress reported in this study, e.g. evaluations, merit awards, promotions, salary and time constraints, are related to issues largely outside the control of the teacher. Policy makers need to be more sensitive to the impact of their decisions on the teachers.

- iii) Results show that HOD's as a group are experiencing high levels of stress. This is of concern as it severely limits the potential of HOD's to give support to teachers in their departments. In the future HOD's will play an increasingly important role in implementing envisaged curricular changes, and giving professional support to teachers. To do this effectively they will need far more preparation for their role as well as support than they are given at present.
- iv) Universities and colleges of teacher education can assist in reducing teacher stress in the following ways:
- \* by adopting selection procedures which give personality factors a greater weighting than at present when admitting students into teacher training courses;
  - \* making the content of teacher training courses more effective and relevant to the practical realities of teaching; and
  - \* continuing to encourage and support research relating to teacher stress.
- v) Teachers derive a great deal of intrinsic satisfaction from their work relating directly to pupils and the teaching situation. Steps should, therefore, be taken to eliminate practices which interfere<sup>with</sup> and undermine a teachers' time and effort in this regard.

## 6.6 FUTURE RESEARCH POSSIBILITIES

Although a good deal of research has already been done on teacher stress more is still needed in order to understand the multifaceted nature of the problem. This requires a widening of the boundaries so that the contributions of different disciplines such as medicine, psychiatry and social science can be more effectively included in research relating to teachers.

Further research is also needed to develop more effective strategies for treatment based on individual teacher needs.

Future work in the area of stress management needs to examine the reasons why some teachers are able to continue functioning effectively in stress-laden environments, and to pass on their successful coping skills and techniques to those who succumb more easily to pressure.

This research study has attempted to analyse the problem of teacher stress mainly from the perspective of the teacher. There is a need for future studies to focus on the organizational context of the school and how factors therein (e.g. the system of rewards, varying management styles of principals, autonomy, teacher participation in decision-making processes, and support systems) contribute to stress among teachers and how these can be modified or changed through redesign strategies to reduce stress.

More research also needs to be undertaken to investigate the coping actions and behaviours utilized by teachers in dealing with occupational stress as well as the short-term and long-term effectiveness of the use of the various coping actions.

#### 6.6 POSSIBLE SOURCES OF TEACHER STRESS IN THE FUTURE

South Africa is presently a country in transition and various aspects of South African society are being restructured and democratized.

With the prospect of a unitary education system in the near future, comes the possibility that new types of stressors will emerge. These could include the following : the reorganization of schools along non-racial lines and the adjustment that this would require of all; extensive curricular changes; teaching in unfamiliar environments; teaching pupils from different social and cultural groups and of widely divergent abilities; coping with bigger class units; carrying heavier teaching loads; striving to maintain standards; increased disciplinary problems; and increasing pressure from parents.

Reorganization involves change. While some teachers may welcome reorganization as a challenge, many may not like it because of the feelings of insecurity, uncertainty and apprehension it generates. Chakravorty (1989:79) is of the

opinion that when there are possibilities of reorganisation or amalgamation which may result in job losses or transfers, or changes in teachers' status or promotion prospects, teachers are much better able to cope with the situation if they know what to expect. This is because they have time to mobilize their physical, psychological and material resources to cope with the eventualities.

At present efforts are being made to reduce the teaching personnel to bring it in line with national needs through a wide range of rationalization procedures, including early retirements, retrenchments, and phasing out of certain posts.

This, together with reorganization of the education system, is likely to lead to increased role stress among teachers. Quantitative and qualitative role overload, role conflict and role ambiguity are likely to become more prevalent in the near future as a result of the present policy of rationalisation, budget cutbacks and job freezes.

Central government and local education authorities should undertake research to analyse and evaluate the effects of these developments on teachers, the stressful effects of change itself and of the policies they implement.



### CONCLUDING COMMENTS

The evidence from this study makes it clear that occupational stress among teachers can be costly in human, educational and economic terms.

Furthermore, the fact that lack of personal accomplishment was identified as the most important source of stress, and that exhaustion as well as indifference and apathy were identified as two of the major symptoms of stress, provides evidence that the three ingredients for teacher burnout may be already present in this study, and that a substantial proportion of the teachers surveyed may be prime candidates for burnout.

It becomes imperative, therefore, that the teacher stress problem be addressed urgently if quality educational programmes are to be implemented in schools and student performance upgraded.

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APPENDIX A

DEAR COLLEAGUE

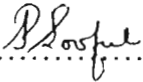
Stress amongst teachers has, in the last few years, become a popular topic in the professional literature and at conferences of educational organisations. Its practical implications extend to most aspects of human life and work.

Although studies of stress have generated vast literature in physiology, biochemistry, medicine, psychology and sociology, studies in education, particularly in respect of teacher stress are scanty. In order to help our fellow-teachers gain reliable information on this vital subject as it affects them, I am carrying out a carefully designed research study at Master's level. For this I need your kind co-operation and participation.

I would appreciate it if you could kindly complete the questionnaire as honestly and frankly as possible. Please be assured that your responses will be treated as strictly confidential and used for research purposes only. To ensure anonymity, please do not write your name or the name of your school anywhere on this questionnaire.

After you have completed it, place the questionnaire in the envelope provided, seal it and hand it to me when I return to your school.

Thank you for your kindness and support.

  
.....

P SOOFUL (MRS)

RESEARCHER

.....

PROF. A RAMPHAL

SUPERVISOR

# TEACHER-OCCUPATIONAL INVENTORY (TOI)

## PART ONE

PLEASE ANSWER EACH ITEM BY INSERTING A CROSS (X) IN THE APPROPRIATE BLOCK, WHERE APPLICABLE. SOME ITEMS REQUIRE BRIEF WRITTEN RESPONSES.

1. 

Male
------

Female
--------
  
2. 

Married
---------

Single
--------

Divorced/ Separated
------------------------

Widowed
---------

Other (Specify)
--------------------
  
3. Age in completed years  

20-24
-------

25-29
-------

30-39
-------

40-49
-------

50 & over
-----------
  
4. Teaching experience in completed years  

0-3
-----

4-10
------

11-15
-------

16-20
-------

21-25
-------

26-30
-------

31-35
-------

36+
-----
  
5. Highest qualification obtained  

Diploma
---------

Bachelor's Degree
----------------------

Honours/ B.Ed Degree
-------------------------

Master's Degree
--------------------

Other (Specify)
--------------------
  
6. Position held in school  

Assistant Teacher
-------------------

Head of Department
--------------------

Other (Specify)
-----------------
  
7. How many achievement recognition awards (merit awards) have you received to date?  

None
------

1
---

2
---

3
---
  
- 8.1 Specialisation subjects : BUSINESS, ECONOMICS & ECO
- 8.2 Subjects being taught by you this year : ECO  
PE
  
9. Please indicate if you are engaged in any of the following activities after school hours  

PART-TIME STUDIES
-------------------

A PART-TIME JOB
-----------------

OTHER (excl. extra-curricular related to school)
---

10. READ EACH ITEM AND WRITE THE NUMBER THAT BEST INDICATES YOUR DEGREE OF STRESS.  
USE THE FOLLOWING SCALE AS A GUIDE  
AS A TEACHER, HOW STRESSFUL DO YOU GENERALLY FIND:-

1	2	3
NOT	MODERATELY	VERY
STRESSFUL	STRESSFUL	STRESSFUL

- |        |   |   |   |   |
|--------|---|---|---|---|
| 10.1   | the amount of recording keeping and clerical work?                                      | 1 | 2 | 3 |
| 10.2   | dealing with student discipline problems?   | 1 | 2 | 3 |
| 10.3   | attitudes of the Principal towards you?   | 1 | 2 | 3 |
| 10.4   | relating to your HOD/immediate superior?  | 1 | 2 | 3 |
| 10.5   | attitudes of other members of staff towards you?  | 1 | 2 | 3 |
| 10.6   | the present system used to evaluate teachers?   | 1 | 2 | 3 |
| 10.7   | the present system used to determine promotions?  | 1 | 2 | 3 |
| 10.8   | the present system used to award merit notches?   | 1 | 2 | 3 |
| 10.9   | some pupils' declining interest in schoolwork?  | 1 | 2 | 3 |
| 10.10  | being accountable for pupils' performance?  | 1 | 2 | 3 |
| 10.11  | the limited time available at school for lesson preparation and marking?                | 1 | 2 | 3 |
| 10.12  | the time limits set for completing tasks?   | 1 | 2 | 3 |
| 10.13  | the number of demands made on your time by non-teaching activities?                     | 1 | 2 | 3 |
| 10.14  | not being given sufficient opportunity for participating in decision-making processes?  | 1 | 2 | 3 |
| 10.15  | the salary you receive in relation to the amount of work you do?                        | 1 | 2 | 3 |
| 10.16  | the lack of interest shown by some parents in the progress/behaviour of their children? | 1 | 2 | 3 |
| 10.17  | serving relief for absent teachers?   | 1 | 2 | 3 |
| 10.18  | teaching pupils of widely divergent abilities in the same class?                        | 1 | 2 | 3 |
| 10.19  | the teaching facilities and resources available to you at your school?                  | 1 | 2 | 3 |
| 10.20. | the opinion held by others of the teaching profession?                                  | 1 | 2 | 3 |

11. NINE JOB-RELATED STATEMENTS ARE GIVEN BELOW. FOR EACH STATEMENT SELECT THE SCALE NUMBER THAT BEST DESCRIBES HOW YOU FEEL ABOUT YOUR WORK SITUATION. WRITE ONLY THE NUMBER IN THE SPACE PROVIDED.

(1) YES                      (2) NOT SURE                      (3) NO

- |      |   |       |
|------|---|-------|
| 11.1 | I feel that my job interferes overly with my home life.   | ..... |
| 11.2 | I have to "feel my way" in performing my duties because directives or instructions are vague.               | ..... |
| 11.3 | I feel I have too heavy a workload.   | ..... |
| 11.4 | I feel I am not able to satisfy the conflicting demands made by superiors, colleagues, pupils and parents.  | ..... |
| 11.5 | There are many times when I do not feel sure about the manner in which my superiors evaluate my teaching.   | ..... |
| 11.6 | I feel that the amount of work I have to do adversely affects the quality of the work I am able to produce. | ..... |
| 11.7 | I feel that I am compelled to perform duties that, in my judgement, appear to have little value.            | ..... |
| 11.8 | I feel that I am given too little authority to carry out my responsibilities in the manner I see fit.       | ..... |
| 11.9 | I feel that I am given many duties for which I have not been adequately trained.                            | ..... |

#### PART TWO

12. FROM THE LIST BELOW, INDICATE ONLY THOSE SYMPTOMS WHICH YOU HAVE DISPLAYED STRONGLY IN THE SCHOOL SITUATION OVER THE PAST YEAR. PUT A CROSS (X) IN THE APPROPRIATE BLOCK :-

- |       |                                  |       |
|-------|----------------------------------|-------|
| 12.1  | "Tension" headaches              | ..... |
| 12.2  | Feeling tearful                  | ..... |
| 12.3  | Frustration                      | ..... |
| 12.4  | Anxiety                          | ..... |
| 12.5  | Exhaustion                       | ..... |
| 12.6  | Weight loss                      | ..... |
| 12.7  | Feelings of isolation            | ..... |
| 12.8  | Increased consumption of alcohol | ..... |
| 12.9  | Increased smoking                | ..... |
| 12.10 | Bodily pains                     | ..... |
| 12.11 | Increased use of tranquilisers   | ..... |
| 12.12 | Indifference and apathy          | ..... |

3. PLEASE CONSIDER EACH STATEMENT IN THE LIST BELOW AND INDICATE HOW FREQUENTLY YOU USE SUCH ACTIONS TO COPE WITH STRESS AT SCHOOL, USING THE FOLLOWING TABLE :-

		1	2	3	4	
		NEVER	SOMETIMES	OFTEN	VERY OFTEN	
13.1	Throw yourself into your work.	1	2	3	4	
13.2	Let people know exactly where you stand.	1	2	3	4	
13.3	Try to get advice and suggestions from some person.	1	2	3	4	
13.4	Try to see the humour of the situation.	1	2	3	4	
13.5	Try to keep things in perspective.	1	2	3	4	
13.6	Take no action and carry on as usual in the hope that the tension would wear off.	1	2	3	4	
13.7	Try to reduce the tension through physical activity.	1	2	3	4	
13.8	Become involved in some recreation or hobby.	1	2	3	4	
13.9	Engage in positive thoughts and future rewards.	1	2	3	4	
13.10	Express your feelings and frustrations to others.	1	2	3	4	
13.11	Take time off from school to recover.	1	2	3	4	
13.12	Try to forget work when the day is finished.	1	2	3	4	

### PART THREE

14. WE SHOULD LIKE TO KNOW HOW YOUR HEALTH HAS BEEN IN GENERAL, OVER THE PAST 3 MONTHS. PLEASE ANSWER ALL THE QUESTIONS BELOW SIMPLY BY TICKING THE APPROPRIATE COLUMN WHICH YOU THINK MOST NEARLY APPLIES TO YOU.

HAVE YOU :

1.	been able to concentrate on whatever you are doing?	Better than usual	Same as usual	Less than usual	Much Less usual
2.	lost much sleep over worry?	Better than usual	Same as usual	Less than usual	Much Less usual
3.	felt that you are playing a useful part in things?	Better than usual	Same as usual	Less than usual	Much Less usual
4.	felt capable of making decisions about things?	Better than usual	Same as usual	Less than usual	Much Less usual
5.	felt constantly under strain?	Better than usual	Same as usual	Less than usual	Much Less usual
6.	felt you couldn't overcome your difficulties?	Better than usual	Same as usual	Less than usual	Much Less usual

7. been able to enjoy your normal day-to-day activities?	Better than usual	Same as usual	Less than usual	Much Less usual
8. been able to face up to your problems?	Better than usual	Same as usual	Less than usual	Much Less usual
9. been feeling unhappy and depressed?	Better than usual	Same as usual	Less than usual	Much Less usual
10. been losing confidence in yourself?	Better than usual	Same as usual	Less than usual	Much Less usual
11. been thinking of yourself as a worthless person?	Better than usual	Same as usual	Less than usual	Much Less usual
12. been feeling reasonably happy, all things considered?	Better than usual	Same as usual	Less than usual	Much Less usual

#### PART FOUR

15. WHICH TWO ASPECTS OF TEACHING GIVE YOU MOST SATISFACTION?

.....  
 .....  
 .....

16. WHICH TWO ASPECTS OF TEACHING MAKE YOU MOST UNHAPPY?

.....  
 .....  
 .....

17. HOW LIKELY IS IT THAT YOU WILL STILL BE A SCHOOL TEACHER IN TEN YEARS' TIME?

Very unlikely

Unlikely

Not Sure

Very Likely

18. OVERALL, HOW STRESSFUL DO YOU FIND TEACHING TO BE?

Not stressful

Moderately stressful

Very stressful

Your assistance is deeply appreciated.

Yours sincerely

*P Sooful*  
 .....  
 P SOOFUL (MRS)

## APPENDIX B

### GUIDE TO IN-DEPTH INTERVIEW

MARITAL STATUS : .....

SEX : .....

TEACHING EXPERIENCE : .....

RANK : .....

#### GENERAL

1. What do you consider to be the three most important sources of stress for you as a teacher?
2. In a recent study I conducted in ten secondary schools, a significant number of teachers indicated that the following situations were particularly stressful to them. In those cases where you agree with them, can you advance possible reasons for feeling this way?
  - Record-keeping and clerical work
  - The present system of evaluation
  - The present system of promotion
  - The present system of awarding merit notches
  - Inadequate salary
  - Some pupils' declining interest in schoolwork
  - Being accountable for pupils' performance
  - Having too limited time for lesson preparation and marking
  - Having too many demands made by non-teaching activities
  - Lack of interest by some parents in their children's progress at school
  - Teaching pupils of widely divergent abilities
  - Insufficient opportunities for participation in decision-making
  - Job interfering overly with teachers' home life
  - Having too heavy a workload
  - Uncertainty about how superiors evaluate a teacher's ability
  - Being compelled to perform duties that teachers see as having little value
  - Having too little freedom to carry out teaching responsibilities in accordance with the teacher's own wishes
3. How many hours per day do you spend at home on school-related work?
4. How likely is it that you would still be a schoolteacher in ten years' time?
  - 4.1 Very unlikely
  - 4.2 Unlikely
  - 4.3 Not sure
  - 4.4 Most likely
5. How do you react to excessive stress in teaching?
6. How does excessive stress affect your attitude and



behaviour

- 6.1 towards your superiors?
- 6.2 towards your pupils?
- 6.3 towards your family?
- 6.4 towards people outside school (i.e. in your social life)?
7. Are you engaged in part-time studies? YES/NO
- 7.1 If YES, explain why are you studying?
8. How do you attempt to cope with the pressures of teaching?
9. Which aspects of teaching give you most satisfaction? Why?
10. Which aspects make you most unhappy? Why?
11. What steps do you suggest should be taken to remedy these problems?

#### HEADS OF DEPARTMENTS ONLY

Which of the variety of duties you have to perform do you find particularly stressful?

#### BEGINNING TEACHERS

1. Which aspects of teaching have caused you most problems?
2. From which of the following did you prefer to seek help:
  - 2.1 Administrative staff?
  - 2.2 Other teachers?
3. As a beginning teacher, what special efforts did you make to come to terms with the problems facing you?
4. Was your teacher education adequate to prepare you for your role as a teacher? YES/NO. Please explain fully.
5. As a result of your own experience, explain what steps could be adopted by teacher education institutions and the professional staff at schools in helping beginning teachers to cope with stress.

#### MARRIED WOMEN TEACHERS

1. What particular problems (if any) do you experience in trying to balance your home and work roles?
2. Teaching is a very demanding job. Do you receive any support :

2.1 At home? YES/NO

2.2 At school? YES/NO

3. If YES, state nature of support you receive :

3.1 At home

3.2 At school

# APPENDIX C

## COPIING ACTIONS : THE MOST AND LEAST POPULAR COPIING ACTIONS FOR EACH SUBGROUP

SUBGROUP	MOST POPULAR COPIING ACTIONS	LEAST POPULAR COPIING ACTIONS
<u>SEX :</u>		
Males	Keep things in perspective (*99%) Let people know exactly where you stand (91%)	Take time off from school to recover (*5%) Take no action and carry on as usual (58%)
Females	Keep things in perspective (98%) Get advice and suggestions from someone (91%)	Take time off from school to recover (5%) Reduce tension through physical activity (47%)
<u>MARITAL STATUS :</u>		
Married	Keep things in perspective (99%) Let people know exactly where you stand (90%)	Take time off from school to recover (6%) Reduce tension through physical activity (58%)
Single	Keep things in perspective (99%) Get advice and suggestions from someone (96%)	Take time off from school to recover (16%) Reduce tension through physical activity (55%)
<u>AGE :</u>		
20-24 Years	Keep things in perspective (100%) Get advice and suggestions from someone (100%)	Take time off from school to recover (19%) Reduce tension through physical activity (44%). Become involved in some recreation or hobby (44%)
25-29 Years	Keep things in perspective (97%) Get advice and suggestions from someone (93%)	Take time off from school to recover (10%) Reduce tension through physical activity (53%)
30-39 Years	Keep things in perspective (99%) Let people know exactly where you stand (95%)	Take time off from school to recover (6%) Take no action and carry on as usual (57%)
40+ Years	Keep things in perspective (100%) Let people know exactly where you stand (87%)	Take time off from school to recover (3%) Reduce tension through physical activity (53%)
<u>TEACHING EXPERIENCE</u>		
0-3 Years	Keep things in perspective (100%) Get advice & suggestions from someone (97%)	Take time off from school to recover (13%) Reduce tension through physical activity (40%)
4-10 Years	Keep things in perspective (98%)	Take time off from school to recover (11%)

	Let people know exactly where you stand (91%)	Take no action and carry on as usual (58%)
11-20 Years	Keep things in perspective (99%) Let people know exactly where you stand (93%)	Take time off from school to recover (6%) Try to forget work when day is done (63%)
21+ Years	Keep things in perspective (100%) Try to see the humour of the situation (89%)	Take time off from school to recover (0%) Take no action and carry on as usual (44%)

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#### QUALIFICATION

Diplomates	Keep things in perspective (97%) Let people know exactly where you stand (88%)	Take time off from school to recover (12%) Reduce tension through physical activity (51%)
Graduates	Keep things in perspective (99%) Get advice and suggestions from someone (93%)	Take time off from school to recover (7%) Reduce tension through physical activity (57%)
Post Graduates	Keep things in perspective (100%) Let people know exactly where you stand (91%)	Take time off from school to recover (6%) Take no action and carry on as usual (47%)

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#### RANK

Level 1 Teachers	Keep things in perspective (98%) Let people know exactly where you stand (91%)	Take time off from school to recover (10%) Reduce tension through physical activity (57%)
HOD's	Keep things in perspective (100%) Engage in positive thoughts and future rewards (88%)	Take time off from school to recover (2%) Reduce tension through physical activity (60%)

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\*Percentages in brackets denote response "often/very often" made by each subgroup