SURVEY OF TEACHER STRESS IN SECONDARY SCHOOLS IN THE LOCAL AUTHORITY

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SUMMARY

The research involved a questionnaire survey of teacher stress amongst 122 experienced teachers in 11 - 16 coeducational comprehensive schools in a local education authority. Employing a specially constructed stress scale it was concluded that overall 10% of the sample were experiencing stress and that 4% were experiencing severe stress. Significant relationships were found between teacher stress and 'position held in school', 'discipline', 'the supportiveness of the Headteacher', and 'the supportiveness of the teachers'. The four main causes of teacher stress were identified as 'Insufficient time', 'Too much expected of teachers', 'Large schools', and 'Physical conditions, facilities, etc'. The four main types of assistance which teachers requested were 'Training for further responsibilities', 'Intellectual stimulation and refreshment', 'Class management', and 'Motivating pupils'. The practical and theoretical implications of these conclusions are discussed.

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Alun Phillips
March, 1980

CONTENTS PAGE

CONTENTS PAGE

CONTENTS PAGE

TABLE AND FIGURES PAGE

TABLE AND FIGURES PAGE

1. INTRODUCTION

The interest of the author in the subject of teachers and stress arose out of the day-to-day school situation. The school was an expanding 11 - 16 comprehensive set in a predominantly working class catchment area. It had a nine form entry. The school had been created in 1973 by amalgamating a boys' school and a girls' school, both secondary modern. In 1974 another reorganisation took place and, as a result, the school became a comprehensive. Both reorganisations entailed the use of split site premises and building programmes. It seemed that during the school academic years of 1975 - 1976 and 1976 - 1977, several colleagues were not at one with their occupation, that if one had conceptualised teacher job satisfaction and teacher job-disatisfaction as continnua then they would have been placed low on the former and high on the latter. The teachers in question were from both sexes and of varying lengths of teaching experience. As to why these teachers found themselves in these situations was often the topic of conversation in the staffroom - usually when they were not present! Problems of discipline, administration, level of academic work, preparation and presentation of lessons, and so on were put forward as explanations.

But amongst this chorus of concern several factors appeared to stand prominent. Firstly, although the causes of this 'teacher-discomfort' were varied, one or two were peculiar and relevant to the individual teachers. Secondly, the reactions

of these teachers to their situations were not uniform. For example one became prone to skin rashes, two were periodically absent for short intervals, and yet another became excessively rigid, even punitive in his treatment of the pupils. It was judged that these teachers' reactions were related, in some way, to their prevailing circumstances. But, then, the validity and reliability of these perceptions underpins a lot of what has already been written. Thirdly, the difficulties that these teachers faced and their seeming inability to overcome them detrimentally affected their relationships with other members of staff and it is conceivable that this could have exacerbated their problems. Perhaps, faced with examples of what could happen to even them, their colleagues became intolerant and unable to make any real positive contributions towards solutions.

This last point leads on quite naturally to the next. It was soon very striking that both the teachers under 'stress' and their colleagues were reluctant to discuss together the problems that were being encountered. The problems existed but they were not openly acknowledged to exist. They remained latent as if by tacit agreement. The possibility of being labelled as incompetent and the hallowed respect of the autonomy of the individual teacher served to reinforce the 'professional isolation' (Hargreaves, 1978). I found it increasingly paradoxical that while the educational system in general, and the local authorities and schools in particular, made arrangements to help probationary teachers, very little was done to assist the more experienced teachers, always supposing that they would admit to

having difficulties. As a head of department I had usually found it relatively easy to talk about the problems of teaching with the younger teachers, but whenever I tried to broach similar matters with the older teachers I met with either a veil of silence or a show of unconcern. One of the unwritten rules of teaching is that experienced teachers shall not have problems!

During the years 1976 and 1977 the phrase 'teacher-stress' was firmly established on the national education scene. The NAS/UWT produced their booklet 'Stress in Schools' in 1976. The word 'stress' was gaining currency and when one of my school's troubled teachers had it written on their doctor's note there seemed to be little doubt that it was now also a local phenomenon. Eventually, I found myself faced with several questions. What exactly was stress? How was it caused? In what ways was it manifested? What could be done to alleviate it? How many teachers could be said to be 'under stress' and to what degrees? Were there any biographical or school characteristics associated with teacher-stress? So, my desire to undertake a research degree, particularly with a theme of practical relevance to teachers and teaching, was quite naturally united with my growing interest in the subject of teachers and stress. So, my motives were not entirely personal. I was concerned for the mental and physical health of my colleagues, as well as their teaching effectiveness. Like Hargreaves (1978), I felt a certain 'sadness at the personal waste involved. We have locked

up in our schools not only a significant proportion of the nation's talent, but also a wealth of energetic and idealistic social concern.' Surely, a school should be 'educative and supportive to the teachers as well as to the pupil' (Giles, 1977). Most teachers, at some time, require an informed shoulder to lean on, an 'on-the-spot human wailing wall at which to gripe,to rage, to express fears and confess mistakes, to ask questions and wonder aloud' (Long and Newman, 1965). If such a service existed, within an open, honest and caring environment, then teachers might not only become aware of their strengths and weaknesses but of their potential for personal growth and professional maturation.

I was also concerned for the effects that teacher-stress might have on the pupils, educationally and personally. Coates and Thoresen (1976), although not drawing firm and unambiguous conclusions, remarked that some 'studies suggest that, at some level, anxiety in classroom teachers may become detrimental both to teachers themselves and pupils. Pupils learn patterns of behaviour just as surely as they learn subject matter.' Broadbelt (1973) made the same point, although more dramatically, and forcefully, when he wrote, 'I contend that there should be a program to diagnose mentally maladjusted teachers and other school personnel ... to protect pupils from distressed teachers ... to select out ... those who are capable of psychologically damaging their puils.' Could a teacher, then, who was experiencing

difficulties adequately discharge his or her responsibilities to the pupils?

RESEARCH TIMETABLE

The following table outlines the schedule for the main stages of the research.

Date	Stage	Description
May 1977 - December 1977	Literary Review	Of original and secondary sources on stress and teacher-stress
January 1978 - March, 1978	Research Design	Decisions made concerning aims, objectives, variables, methods, sample, etc.
April 1978 - June 1978	Research Instrument	a) Questionnaire constructed and revised. b) Questionnaire pre-tested and revised.
July, 1978	Data Collection	a) LEA approached for access to schools (May/June 1978) b) Questionnaires distributed and collected.
August 1978 - June 1979	Data Analysis	a) Questionnaires coded and punched b) 'Codebook' analysis of questionnaires. c) Pearson Correlation Matrix and Stress Scale constructed. d) Analysis of Variance of data e) 'Codebook' analysis of Stress scores.
July 1979 - November 1979 December 1979 February - March 1980	Write-up	a) Of above stages of research. b) Of research findings. c) Of final aspects of thesis.

Table 1: Research Timetable

2. REVIEW OF LITERATURE

2.1 Review of General Stress Literature

The literature, either academic or popular, on stress in general has greatly expanded during the last ten years. The specialist can turn to works such as 'Psychological Stress' (Appley, M.H. and Trumbull, R., 91967) or 'Emotional Stress' (Levi, L., 1967) while the layman has 'Stress in Your Life' (Packer, E., 1974) or 'Living with Stress'(Graham-Bonnalie, F.E., 1972). Those of the reading public who are teachers will find that the pages of the 'Times Educational Supplement' often include articles or newspieces which make reference to stress, eg 'Sweden. Vast majority of teachers complain of stress' (TES, October 28, 1977), ''Stress' pay: teachers win the first round' (TES, November 18, 1977). So, to some extent teacher stress is a vogue word.

2.1.1. What is stress?

Before examining some of the previous work on teachers and stress there are some preliminary comments which should be made. The first applies to 'what is meant by stress?' However, there is no one correct definition of stress, and neither is there one agreed reference to stress. Graham-Bonnalie (1972) and Levi (1967) refer to 'emotional stress'; Packer (1974) writes about 'environmental stress' and 'social stress', while Selye (1956, 1975) referes to 'interpersonal stress' and 'psychic stress'. Appley and Trumbull (1967) have written about 'psychological stress' while Selye (1956) is mainly associated with the biological concept of stress. In a recent article on teacher

stress, Kyriacon and Sutcliffe (1978a) remarked on the proliferation of terms which apply to 'occupational stress'. They noted 'work stress', 'job stress', 'industrial stress', 'organisational stress', 'job pressure' and 'job strain'.

However, there does seem to be two fairly widely accepted usages of the term stress. The first sees stress as coming from the individual's environment, particularly, the negative aspects. Thus, for the teacher, stress could be seen as coming from inadequate working conditions, work overload, noise, staff relationships, etc. The second definition of stress emphasises the response of the individual. In other words, an individual is said to be under stress if, when confronted with certain stimuli, he or she responds in a negative manner. For example, Warr and Wall (1975) defined work stress in terms of the individual's experience of tension, anxiety, fear, discomfort and associated physiological disorders. The present research conceptualises stress as a state of the individual (see Section Four of the Questionnaire, Appendix A) and examines several behavioural and psychological manifestations. This latter approach is preferred because it does allow consideration to be given to the role of the individual, especially his appraisal of what might be stress-inducing. What is a stress-stimulus to one person is not to another. People vary in their 'cognitive appraisal' (Lazarus, 1967) or 'threat-perception' (Appley, 1967) of potential stress'stimuli. In the words of Tanner (1977), 'the objective nature of an event or situation is not nearly as important as its meaning to a particular individual at a particular

moment'. The first usage of stress, as pressure exerted from the environment, would appear to ignore this vital point.

It would be appropriate at this juncture to emphasise that generally stress is regarded as unpleasant, even in extreme cases, fatal. However, several writers have commented on the positive effects of stress, especially as regards learning and achievement (Graham-Bonnalie, 1972; Janis, 1971; Selye, 1975). There is evidence to suggest that a lack of stress can impair emotional and physical well being. It seems that the absence of stress in itself is a kind of stress. In order to make clear this distinction between negative stress and positive stress, Selye (1975) suggested the terms 'stress' and 'distress'.

2.1.2 Stress responses

If, then, an individual feels that his well-being, status, position, etc, are threatened, how will he respond? There appear to be three types of response to stress: psychological or emotional, behavioural and physiological. However, how people under stress respond will vary from individual to individual, ie the same stress-stimulai will not be associated with the same response(s). Lazarus (1967) referred to this as 'response-specificity', eg one person's stress response may be an increased heart-rate whilst another person may have a skin-reaction.

The most obvious response is the emotional one, ranging from mild annoyance to extreme anxiety, but this type of response

can be difficult to measure. Easier to analyse objectively is the behavioural response. This can be seen in a change in performance or behaviour. The effect of stress can be measured by the increase in the rate of error in carrying out a task, by a fall in job productivity or by a deterioration in personal relationships. Absenteeism from work is one behavioural response which has been quite extensively studied. The third category of response involves physiological changes such as heart rate and blood pressure. Although these modes of response are distinguishable from one another they can be related. This inter-relationship is illustrated by psychosomatic medicine - psychologically induced physical illness. There is evidence to suggest that stress can be a factor in headaches, backaches ulcers and heart disease.

2.1.3 Stress as an individual phenomenon

There can be little doubt that stress is a highly individual almost idiosyncratic phenomenon. Part of the explanation for this resides within or about the individuals themselves - their differences in biographical details (eg, age, sex) personality, heredity, past experience, skills and abilities, social milieu, etc. Factors like these have been variously described as 'social' (Appley and Trumbull, 1967) and 'internal conditioning and external conditioning' (Selye, 1956). In their model of teacher stress Kyriacou and Sutcliffe (1978a) quite rightly had these factors affecting the appraisal of potential stress-stimuli, the 'coping mechanisms' employed and the stress-responses. It is also these

factors which help explain the differences between individuals in the intensity of stress-stimuli that they can withstand, that is, in their 'psychological stress tolerance' or 'optimum stress levels' (Selye, 1975). The 'coping processes' (Lazarus, 1967) which individuals use to try and reduce stress also vary. 'Denial' of the existence of the stress situation and 'withdrawal' from the situation, eg, absenteeism, are two such coping strategies. The success or failure of these strategies is directly related to the experiencing of stress.

2.1.4 Stress over Time

Several writers refer to the 'time dimension' of the stress syndrome. Levi (1967) has drawn attention to the 'short term' and 'long term' aspects of stressors. Both Blythe (1973) and Janis (1971) refer to the effects of an accumulation of stresses which can, eventually, lower one's stress-tolerance. Appley (1967) conceptualised the stress syndrome as a normal-abnormal continuum, passing through a number of thresholds:

a) the instigation threshold,

b) the frustrations threshold,

c) the stress threshold, and

d) the exhaustion threshold.

This concept is very similar to the stages of Selye's (1956) 'General Adaptation Syndrome':

a) the alarm reaction

b) the stage of resistance, and

c) the stage of exhaustion.

Each of these stages is associated with various physiological

reactions.

2.1.5 Comments

Before going on to examine some of the previous work on teacher stress it would be apposite to note some of the implications of the previous comments for this research. The first concerns the need for a definition of teacher stress, a need which has now been adequately catered for by the recent work of Kyriacou and Sutcliffe (1978a). However, bearing in mind the various points of the previous discussion on stress in general, eg, the individual nature of stress, the importance of appraisal mechanisms, the use of coping strategies, a simpler definition may still be offered here. Therefore teacher stress is taken to refer to 'The negative response of a teacher, be it psychological and/or physiological and/or behavioural, to the demands, circumstances, pressures, etc, involved in his work as a teacher.' Two other implications derive from this definition, one regarding the sort of stress response(s) by teachers that could be meaningfully anticipated and examined and the other concerning the diversity of stress-stimuli or 'stressors' which teachers experience. Obviously it was hoped, that any previous literature would help resolve these questions. Another implication concerned due reference being given to the possible involvement of the subjects' biographical characteristics, eg, age, sex, position in school. A consideration of some school details also seemed relevant, eg size, Social Priority Allowance, split site. The final implication

centred on the concept of coping strategies, eg how did teachers cope with their stress-situation, what could be done to alleviate the stressors?

2.2 Review of Teacher Stress Literature

The previous research on stress amongst teachers is inconsiderable. In fact, it is only in the last few years that the word 'stress' has been used. Before 'dissatisfaction' was usually used. However, in their recent review of the available literature, mainly that of British and American origin, Kyriacou and Sutcliffe (1977a) maintained that there was a close association between the sources of job dissatisfaction and the sources of teacher-stress. This review will, in the main, restrict itself to research in this country.

One of the earliest British works relevant to this field of study is Gabriel's (1957) analysis of the emotional problems of the teacher in the classroom, which was based on research carried out between 1948 and 1950. Gabriel found that the main causes of 'worry and strain' were teaching large classes, slow progress in the 3 R's, pupil misbehaviour and a negative attitude to classwork and towards the authority of the teacher. At the primary and secondary stages the academic progress of the children assumed greater importance and became a source of greater worry and strain. Gabriel also found that 'women teachers experience significantly greater worry or strain than do men teachers'; that young teachers were still likely to be concerned about the behaviour of the children, and that there appeared to be 'greater' strain

and frequency of problems for teachers or large classes'. Degree of strain was measured numerically from 0 - 4.

It is worthwhile speculating to what extent Gabriels' 'worry and strain' is the 1950's equivalent of today's 'stress'. It certainly would be in common parlance. Also some of Gabriels' causes of strain have a familiar ring to them, and will be referred to in later researches. For example, negative pupil attitudes and behaviour as well as a concern for the progress in learning of the children were cited by Pratt (1978) as issues associated with 'perceived stress'.

In their work on dissatisfaction among teachers Rudd and Wiseman (1962) ranked the major sources of dissatisfaction as salaries, poor human relations among the staff, inadequate buildings and equipment, high teaching load, training inadequacies, large classes, expressions of personal inadequacy, lack of time for certain professional duties and low status of the profession in society. They found that the main dissatisfaction among male teachers was 'teachers' salaries', whilst that for the female teachers was 'large classes'. As to sex differences in general, Rudd and Wiseman concluded that 'women are more preoccupied with day-to-day classroom problems and stresses whilst men appear to experience their frustrations in a wider context'. It is interesting to note Rudd and Wiseman's use of 'stresses'. It would seem that they equated 'dissatisfaction' with 'stress' although they neither fully explained what they meant by 'dissatisfaction' nor outlined any of its manifestations.

Taylor and Dale (1971) found that the major teaching problem experienced by probationary teachers concerned dealing with groups of wide ability. This finding was supported by Gough (1974). However, in both studies, it was classroom discipline which Headmasters regarded as the major problem.

In ther survey of EPA teachers, Payne (1974) concluded that these teachers felt themselves to be 'worse off' than non EPA teachers regarding neighbourhood, social prestige, physical conditions, salary scale, and position as a whole. There were also sex and age differences in degrees of dissatisfaction with some aspects of their work-situation and although the EPA teachers felt they were 'better off' in 'worthwhileness of work' and 'general satisfaction' these were still not enough to reduce the rate of teacher-turnover. For the purposes of this research it may be asked whether the 'worse off' aspects of their teaching situation can be seen as stress-stimuli and the rate of teacher-turnover as a stress response? The provision in 1975, of SPA allowances (the 'stress' pay of the TES headline) provides support for an affirmative reply.

It seems probable that it was Sutcliffe and Whitfield (1976) who first wrote about teacher stress, in connection with their research on decision making in the classroom. In attempting to identify 'null' decisions, those decisions which were accompanied by no observable changes in behaviour or action, Sutcliffe and Whitfield used data concerning heart rate and voice patterns. Both of these measures were claimed to be related to stress. Although their research was primarily concerned with instantaneous decision making, Sutcliffe and Whitfield found that a number of teachers associated stress with interactions in the staffroom and with role conflicts in school rather than with actual class teaching.

In a later expanded report and discussion of their research Sutcliffe and Whitfield (1979) argued that stress, monitored either by changes in the heart rate or analysis of the teacher's voice trace, was associated with class management problems, pupil challenges to teacher accuracy, classroom interuptions (particularly by an adult), and the issuing of commands and requests. They also noted that no experienced teacher reported classroom teaching as being a stressful situation, although the heart rate records indicated

otherwise. The most commonly reported source of stress, Sutcliffe and Whitfield stated, was concerned with role conflict resulting from demands made by others in the school hierarchy as well as from duties and expectations not directly associated with classroom teaching itself.

Although these findings were based on research with two small groups, one consisting of probationary teeachers and the other of teachers of at least five years experience, both groups numbering about twenty, they are noteworthy for their being arrived at by several methods, ie heart rate, voice trace, interviews, and not just one. However, as Sutcliffe and Whitfield themselves conceded these researches marked a beginning. The main focus of their work was decision making and not stress. Further research should be aimed at identifying the sources and manifestations of teacher stress, its extent and degree, as well as identifying ways of alleviating stress.

In an extensive review of the mainly American literature on 'teacher anxiety', Coates and Thoresen (1976) examined the incidence and sources of anxiety among teachers, beginning and experienced, as well as its effects, and the ways of reducing anxiety. Throughout their article 'anxiety', 'stress', 'strain' and 'tension' were taken to be, more or less, synonymous. The writers concluded that 'anxiety appears to occur with considerable frequency and is an important concern, among beginning and experienced teachers'. They emphasised this by commenting that the 'problems of stress and tension experienced by teachers are real, prevalent and potentially deleterious to teachers and

students. Coates and Thoresen found that teacher-anxiety appeared to be associated with a variety of personal, social and physical conditions, ranging from one's concern with one's adequacy as a teacher and discipline problems to the availability of materials and facilities.

However, Coates and Thoresen felt that there was a promising technology of stress and tension management including techniques such as systematic desensitization,relaxation training, and participant modelling, which could be used with teachers. As to the ways in which anxiety was typically expressed, Coates and Thoresen suggested three modes - 'cognitive' (eg, thoughts, images), 'physiological' (eg, heart rate, perspiration), and 'motor' (eg, shaking, stuttering). But they warned future researchers that different individuals or the same individual at different times could display different manifestations of anxiety. Hence their suspicion of single-point self-reporting techniques, particularly those of the pencil and paper kind, which they felt did not allow valid inferences about 'broad dispositions.' Coates and Thoresen were suspicious of questionnaires because of their low or neglible relationships with behavioural and physiological indices. They suggested that future studies should concentrate on the specific behaviours of anxious teachers, not just in the classroom, but in other environments as well.

The question of stress responses interested Simpson (1976). Simpson gave his attention to 'Stress, Sickness Absence and Teachers.' He suggested that sickness absence allowed the teacher to temporarily withdraw from situations of work-stress, while also

allowing him to adapt and develop the necessary skills to continue in his role as a teacher.

Dunham has to date produced three articles concerning stress and teachers. His first reamins the most comprehensive. Writing about 'Stress Situations and Responses' amongst teachers, Dunham (1976) listed reorganisation, role conflict and ambiguity, and poor working conditions as three common stress situations. Frustration and anxiety, with attendant physiological reactions and illnesses, were cited as common stress responses. A third was 'withdrawal', taken to include absence, early retirement, truancy, etc. Dunham concluded that more teachers were experiencing stress and that severe stress was being experienced by more teachers. The reliability and validity of this conclusion, a much quoted one, partly depends upon the nature of Dunham's method of data collection. This appears to have been by interviews, often at courses that teachers were attending. Inevitably, it will be asked how similarly systematic and consistent were these interviews, dispersed over time as they were.

The lack of responsibility and delegation in certain areas of school-life, autocratic decision making, and arbitrary behaviour on the part of the Head, were also associated, by Dunham (1977a) with stress. Dunham also saw strong departmental loyalties and large schools as possible stress-producing areas, in some ways. He emhasised the need for good relationships as well as efficient organisational structures.

The subject of 'Change and Stress in the Head of Department's Role' was also examined by Dunham (1978). Using material provided by 92 Heads of Department, Dunham emphasised role conflict and role confusion as stress situations, the former arising from the contradictory expectations of the Head of Department from pupils, colleagues and parents and the latter, role confusion from the performance of several roles, eg. teaching, leading a team if teachers, tutoring probationers. Dunham cited frustration, anxiety, and psychosomatic symptoms as the chief stress responses. In conclusion Dunham made certain recommendations, including better working conditions and communication systems, and suggested what could be the functions of a Head of Department.

The question of discipline, or more correctly, pupil-indiscipline as a cause of stress was the subject of an edition of the 'Educational Review (1977). In an enlightening article, 'Disruptive and Violent Pupils: The facts and the fallacies', Laslett (1977) concluded that the amount of disruptive and violent behaviour was exaggerated and that schools were not about to be overwhelmed by an avalanche of indiscipline. However, he did believe that these problems were more frequent now than they were years ago and that some teachers faced 'aspects of childrens' behaviour for which their training and past experience has not prepared them'. Reviewing the previous research, Laslett stated that the amount of good evidence was small and that the whole issue of discipline was complicated by the possibility that teachers would be reluctant to admit that they encountered

problems as this could reflect upon their competence. These researches did sometimes agree on certain points. For instance, that boys were involved in indiscipline more than girls; that there were more incidents in urban areas than in rural ones; that the frequency of incidents was greater in secondary schools, and that there seemed to be no clear connection between size of school and disruptive behaviour.

In the same edition of the 'Educational Review', Dunham (1977b) wrote about 'The Effects of Disruptive Behaviour on Teachers'. Drawing heavily upon his earlier work, Dunham emphasised the disturbing behaviour of pupils as a major stress situation for teachers, which often led to them feeling 'drained' frustrated, and vulnerable to psychosomatic disorders such as migraine, hypertension, and peptic ulcer. 'Withdrawal' from the situation was another teacher-response. In order to cope with these demands Dunham suggested that teachers must be given better group-support, relevant inservice training, and opportunities to talk about their stress situation without being made to feel that they were failures.

The importance of organisation and leadership in schools was the subject of the article by Giles (1977). He stated that poor organisation led to 'disorder, discontent and ill-disciplined behaviour', and that 'the unhappiest schools were those with continual tension within the staff or between Head and staff, often about discipline.' The necessity for management methods and a concern for staff morale were cited as valuable aspects of the

role of the Head and the school administration.

The issue of pupil indiscipline and teacher stress was also examined by Comber and Whitfield (1979a). In association with the NAS/UWT, they asked 1600 NAS/UWT members to describe briefly an incident which had fairly recently caused them considerable stress or personal difficulty.' Although, the 40% response rate (642) was disappointing Comber and Whitfield categorised the usable responses (342) by the nature and number of the incidents reported: minor to major indiscipline (202), physical and non-physical conditions in the school (92) emotional outbursts (11) interpupil problems (15) safety, hygiene, accident (9) curriculum, standard of work, examinations (15). Comber and Whitfield concluded that 'indiscipline in many schools is a serious problem impairing the efficiency of the school and imposing considerable stress on teacher'.

Obviously, this conclusion stands or falls by the acceptance or not of the representativeness of the respondents who returned the questionnaire. Also, no clear definitions of stress and its manifestations were given, so leaving it to the respondents to attach whatever meanings they wished to that word. Thus, it must be asked, were Comber and Whitfield comparing like with like?

During their mainly practical discussion of indiscipline Comber and Whitfield noted as 'surprising' the fact that nearly half the respondents claimed that their school work never caused them considerable stress'. They also passed the almost inevitable comment about the subject of teachers and indiscipline - 'perhaps the most significant impression of all is that of the great reluctance of most

teachers to admitting any disciplinary problems and the stigma attached to not being able to keep order'.

In December, 1977, the 'TES' reported a small scale research carried out by Buxton (1977). She found that 60% of her sample of teachers felt under strain, that men felt the strain more than women and that teachers of older pupils were under more stress than teachers of younger pupils. Teachers aged between 35 and 44 and those with 11 to 20 years teaching experience were said to be the worst affected. However, the survey concluded that most teachers enjoyed their work. This research was one of the few to examine the relationships between biographical and school variables and 'stress' or 'strain'. However, since little is known about its operational measures, size of sample, data collection, and so on, it is difficult to pass any further comments except to note that the 'sex'finding is at variance with that of Gabriel's (1957).

Pratt (1978) investigated 'perceived stress' among 124 primary teachers. His use of the word 'perceived' emphasised the importance of the individual's perception of events, situations, etc as stress inducing. He concluded that stress arose from five main areas - a general inability to cope with teaching problems, non-cooperative children, aggressive children, concern for children's learning and staff relationships. Later Pratt referred to a sixth source, 'extra jobs'. Pratt also examined the effects of age and background of the children taught. He claimed that financial deprivation in the home background was positively and highly signficantly related to the incidence of perceived stress among teachers of all but the very youngest children; among those teaching the more deprived, stress increased with the age of

the children taught. A positive association was found between the amount of stress recorded and illness, although there was no proof of cause and effect. Pratt's measure of illness was probably the most authentic yet, its being a general health questionnaire. Pratt also gave his sample a clear indication of what he meant by stress. Pratt estimated that about a fifth of his sample appeared to be 'at risk' and that a handful of those were in need of professional help of some kind.

While much of the stress reported arose from situations involving recalcitrant children, the largestsingle cluster of events related mostly to the teacher's observations of her own failure to teach satisfactorily or at least to cope with the variety of teaching problems, a grouping which has similarities with Rudd and Wiseman's (1962) finding concerning teachers' 'feelings of inadequacy'. Also, the stress area of 'concern for children's learning' does echo the findings of Gabriel's (1957) in which the academic progress of the children assumed greater importance and became a greater source of worry and strain for primary and secondary teachers.

To date the most comprehensive researches into teacher stress have been those of Kyriacou and Sutcliffe. Their review of the relevant literature, Kyriacou and Sutcliffe 1977a has already been mentioned. Indeed some of the aims of this research owe their origin to the lines of enquiry suggested by Kyriacou and Sutcliffe.

The prevalence of stress among secondary teachers was studied by Kyriacou and Sutcliffe (1977b). Having a small sample of just

over 100 from medium sized comprehensive schools, Kyriacou and Sutcliffe asked the teachers to rate on a 5-point scale ('Not at all' to 'extremely') how stressful they found teaching. They found that over a quarter of the sample reported that being a teacher was either 'very stressful' or 'extremely stressful'. The acceptance of this finding may well rest on the validity of their single measure of stress and its collection by self report, as well as the representativeness of their respondents with other teachers. Kyriacou and Sutcliffe also investigated the relationship between teacher-stress (as measured) and various biographical characteristics, ie sex, qualifications, teaching experience and position held in school. Their results indicated little association between teacher-stress and the biographical characteristics. They concluded that, perhaps, examining personality characteristics and stress would be more rewarding.

Kyriacou and Sutcliffe (1978a) next developed a definition and model of the phenomenon. Their model was really an amalgam, albeit a useful and timely one, of several approaches to the general concept of occupational stress, thus illustrating the complicated nature of stress in which so many factors can be involved and interdependent. They defined teacher stress 'as a response 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 or release of adrenocorticotrophic hormones into the blood stream) 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'. Obviously, the characteristics of the teacher, eg values, personality play a vital part in the appraisal of potential stress - stimuli, choice of coping mechanisms, and response outcomes. The success or failure of coping strategies and the experience of stress itself can also affect the future appraisal of potential stressors.

The earlier research of Kyriacou and Sutcliffe (1978b) was further reported on later in 1978 (Kyriacou and Sutcliffe (1978b)). A questionnaire survey was used to investigate the prevalence, sources and symptoms of stress among 257 school teachers in 16 medium sized mixed comprehensive schools in England. About one fifth of the teachers rated being a teacher as either very stressful or extremely stressful. As with their earlier research (1977b), Kyriacou and Sutcliffe found little association between self reported teacher stress and the biographical characteristics of the teachers. Sources of stress ratings included 'pupils' poor attitudes to work', 'trying to uphold/maintain values and standards', and 'covering lessons for absent teachers'. A principal components analysis of the sources of stress revealed four factors labelled 'pupil misbehaviour', 'poor working conditions' 'time pressures' and 'poor school ethos.' The most frequent symptoms of stress reported were 'exhaustion' and feeling 'frustrated'. A principal components analysis of the symptoms revealed one factor labelled 'awareness of stress symptoms' which appeared to be largely defined by reported frequency of feeling 'very tense'.

In their latest research Kyriacou and Sutcliffe (1979) report on a study which investigated the association between self reported teacher stress and job satisfaction, absenteeism and intention to leave teaching. The study took the form of a questionnaire survey involving a sample of 218 teachers in 16 medium sized mixed comprehensive schools in England, once again. The results indicated that there were no differences in means between biographical sub-groups (classified in terms of sex, qualification, age, length of teaching experience and position held in school) for self-reported teacher stress or for job satisfaction. Female teachers reported a greater frequency of absences than did male teachers and teachers who were female, younger and less experienced reported a lesser likelihood of remaining a teacher than did their respective groups of colleagues. The correlations between self-reported teacher stress and job satisfaction, intention to leave teaching, and total days absent were all in the predicted directions and signficant. The correlation between self-reported teacher stress and frequency of absences however failed to reach signficance.

Kyriacou and Sutcliffe also investigated fourteen sources of stress (eg, 'Trying to uphold / maintain values and standards', 'Pupils' poor attitudes to work', 'Individual pupils who continually misbehave') and their relationship with job satisfaction, frequency of absences and intention to leave teaching. There were fourteen signficant associations all in the predicted direction, eg, 'Noisy pupils' and job satisfaction, 'Too much work to do' and frequency of absences. Interestingly the source of stress most strongly associated with job satisfaction, frequency of absences and intention to leave teaching was 'poor career structure' which, when coupled with the finding

that 'inadequate salary' was a source of stress relatively strongly associated with job satisfaction and intention to leave teaching, may offer some support for suggesting that it is the conditions of work rather than the experience of teaching which provide the sources of stress which most strongly contribute to job satisfaction and intention to leave teaching.

Besides actual research work, there is other education literature which has dealt with aspects of a teacher's work which could be viewed as potentially stress-producing areas. For example, the subject of discipline, has been well documented (Caspari, 1976; Hargreaves, 1967, 1976; Turner, 1973; Williams, 1974). Watts (1974), in discussing teaching in general, commented upon the issues and problems raised by comprehensive reorganisation, particularly those pertaining to the need for a comparable reform in teacher-training. The problems raised by comprehensive schools were dealt with by Richardson (1973). Amongst the themes Richardson considered were leadership, communication, curricula innovation, and the pastoral-academic 'split'. The demands on the teacher of mixed ability classes have been discussed with Kelly (1974). The role of the teacher in the classroom, school and society has often been examined. Writing on this subject both Hoyle (1969) and Musgrove and Taylor (1969) refer to the problems of role-conflict, status, and parent/teacher relationships.

2.2.1. COMMENTS AND ISSUES ARISING FROM THE LITERATURE

There are a number of critical points arising from the previous review, which need to be emphasised. They should, however, be seen in the context of there not being extensive research into teacher stress.

Firstly, a number of the studies quoted have not presented a clear conceptual definition of what was meant by 'stress'. Indeed the phrases used have ranged from 'worry and strain', 'anxiety', 'dissatisfaction', and 'personal difficulty', to 'stress' itself.

Secondly, where the word stress has been used with respondents, little attempt has been made to explain to them what exactly is being asked for. Although this approach may have some validity in being in keeping with the individuality of the perception of stress it does little to safeguard scientific, sytematic and consistent comparisons.

Thirdly, where 'stress' has been operationalised at all, it has tended to be as a single item with a range of numerical values. For example, Gabriel's (1957) measure of 'worry and strain' as 0 to 4 or Kyriacou and Sutcliffe's (1977b, 1978) repeated use of 'In general how stressful do you find being a teacher?', with responses scored 0 to 4. Questions may be raised as to the reliability of single-point measures (Coates and Thoresen, 1976) and the validity of a single item as a measure of what is generally agreed to be, a complicated phenomenon. Perhaps, the measures used are better suited as data for computer analysis than as accurate

reflection of a complex concept.

Fourthly, several studies have only concerned samples of 100 to 200 respondents which leaves doubts about the significance and generalisability of findings. These reservations may have an economic value attached to them. For both of the two largest teacher unions, the National Union of Teachers and the National Association of Schoolmasters - Union of Women Teachers, have in their 1979 submissions to the Clegg Pay Comparability Commission emphasised the stresses of teaching.

Fifthly. a number of other comments can be made about the research objectives selected. Generally, the emphasis has been on what causes teacher 'stress' and very little research has been addressed to the questions of the manifestations of stress and what can be done to alleviate teacher-stress or the situations which help to cause it. Also, there has been little work on the relationships between teacher-stress and the different characteristics of teachers and schools.

Finally, the small samples and/or the low response rates have emphasised the centrality of teacher-cooperation in this delicate area of research. Perhaps the use of such an emotive word as 'stress' needs to be avoided as it may prejudice the willingness of the teachers to respond.

The literary review suggested a number of questions for investigation but none was more pressing than the very obvious need for research in this area. When the initial review was undertaken

there was only the work of Dunham (1976) which appeared to be immediately and directly relevant. Also bearing in mind the fact that the word 'stress' had increasingly entered everyday vocabulary, it seemed appropriate to ask if teacher stress really exists. Or, asked possibly naively, were teachers and their commentators reacting to a self-fulfilling prophecy, ie, tell them that they are under stress and eventually they will feel themselves to be so!

However, if teacher stress is accepted then several lines of enquiry present themselves:

1) How widespread is teacher stress? How many teachers are actually experiencing it?

2) Are there degrees of teacher stress, ranging from, say, 'mild' to 'extreme' and what are the proportions of teachers involved in each category?

Both of these questions derived from Dunham's (1976) conclusion that more teachers were experiencing stress and that severe stress was being experienced by more teachers.

3) This question concerned the causes of teac her-stress. What exactly are the stress-stimuli or stressors that teachers are subjected to? Do they involve the pupils for example, their academic progress and/or behaviour? What of the Heads - are they a stress-stimulus to their staffs? Or do some teachers find staff relationships more stressful? The individual uniqueness of stress served as a reminder that one need not necessarily be dealing with

a common denominator stress stimulus. A diversity of stressors was to be expected.

4) This last comment could equally well applied to the fourth question, that of the manifestations of stress revealed by teachers. Do those teachers experiencing stress become dissatisfied with their work? Do they repeatedly absent themselves from the stress-situation? Are they anxious or depressed, angry or fatigued?

5) Two other worthwhile lines of enquiry focussed upon the characteristics of both the respondents and their schools. These questions seemed to offer scope for, at least, comparison of data and even explanation. For example, are male teachers more stressed than female teachers? Does teacher stress decrease with age? Is there a relationship between years of experience and teacher-stress? Are the school's 'middle managers' under more stress than their colleagues who do not hold posts of responsibility?

6) With regard to the second set of characteristics, describing schools, it seemed obvious to include items such as size (in terms of pupil numbers), split site and Social Priority Allowance. It was also thought to be worthwhile to try and make reference to some more intangible aspects of schools, eg, the behaviour of the Headteacher the relationships between the staff, the attitudes of the pupils, the willingness of teachers to seek help. As before, with the biographical details, items such as these could form the basis of comparisons and explanations. For example, are teachers in split site schools more stressed than teachers on unitary sites?

What of the Social Priority Allowance Schools? Did they have a greater incidence of teacher stress than the non S P A schools? Are the teachers who are experiencing teacher stress in schools with autocratic Headteachers? Do they work with uncooperative pupils or unsympathetic colleagues?

7) One characteristic of the developing research themes was their negativeness, they concentrated on what was wrong and how it was manifested. In order to strike something of a balance and bring a more obviously positive aspect to the envisaged work, it was decided to include reference to what could be done to either alleviate or remove the stressors. In one way, this was a natural 'rounding off' for having dealt with stress stimuli and stress manifestations, it seemed conceptually and professionally appropriate to examine the question of coping strategies. Also, if it proved possible to identify worthwhile coping strategies and the need for them, then the participating education authorities would have something constructive on which they could build. For example, if it could be shown that a number of teachers are concerned about pupil indiscipline and even expressed a desire for assistance with such class management, then surely, suitable aspects of action could and should be taken. Here would be a case of relevant in-service training or staff development to which the teachers themselves would respond. This course of action would go some way to meeting the two teacher criticisms of in-service training which Cane (1969) noted, firstly that INSET courses seem to bear little reference to the hard practical realities of teaching, and secondly, that teachers

are insufficiently consulted about their planning and organisation. In this context the concept of coping strategies is being used somewhat retrospectively, ie, their future provision arising from past situations, rather than in any sense of the immediate and present, which would entail an examination of how teachers deal with their current problems.

2.2.2 IDEAS REGARDING A RESEARCH DESIGN

As these general research themes emerged so did certain thoughts about a possible research design. Although the research design will be discussed in more detail later on, some of the considerations which led up to it will be mentioned now mainly because they acted either as constraints on the research or as conditions necessary for its implementation. Firstly, it was believed that benefit would be gained by trying to work with as large a sample as possible. A large sample might provide greater clarity of the various aspects of teacher stress. This seemed to be a vital prerequisite at this early stage of research interest in teacher stress. It was also deemed worthwhile considering that Kyriacon and Sutcliffe (1977b) and Pratt (1978) had already concentrated on small samples of just over one hundred subjects.

Secondly a large sample was thought to presuppose an approach employing a questionnaire as the main data collecting instrument. There were other reasons for this decision. The decision to use a questionnaire had important implications for the sort of stress response on which data could be collected. It appeared to rule out any use of physiological measures, eg, heart rate, and to

emphasise psychological and behavioural ones. It also seemed likely that the type of questionnaire envisaged would be unable to reliably gather information about the personality of each respondent. These two considerations could, of course be overcome by employing other methods, ie, the administration of a specific personality test alongside the use of a questionnaire.

Thirdly, since the principal researcher was working only part time some thought had to be given to the part that the factors of distance and time could play in the research design. Consequently it was decided that a local sample would relieve such problems as the distribution of materials and the collection of data and not impinge too greatly upon the researcher's full time commitments.

2.2.3. THE IMPORTANCE OF COOPERATION

The implementation of the research depended upon cooperation at three levels - LEA, Headteacher and teacher. The positive assistance of the LEA in providing certain information and access to schools was crucial. The LEA would have to be convinced of the value of the research and given a strict promise of anonymity. No LEA would like it to be known that its teachers were under stress and that its schools were stress situations - that would be a poor reflection of its efforts. If then LEA approval was forthcoming, would the Headteachers act upon it and assist in the carrying out of these parts of the research design which affected them? It was anticipated, hopefully, that they would.

Probably the cooperation most crucial for the research was that of the teachers. Here the delicate nature of the research must be emphasised, for the teachers were to be asked to divulge thoughts and feelings which would usually remain very private. Caspari (1976) noted the reluctance of teachers to communicate their problems, feeling that if they did it would be an indictment of their ineffectiveness. This research depended very much on the honest support and cooperation of the teachers selected.

3. RESEARCH AIMS, OBJECTIVES AND HYPOTHESES

3.1 Aims

The general aims of the research were to try and determine the following:

1) The extent of teacher stress, ie, within the limits of the sample chosen, how many teachers could be said to be experiencing stress.

2) The relative magnitude of teacher stress, ie, could it be shown that some teachers were under 'more' stress that others, taking into consideration the view that the latter were also experiencing stress.

3) Some of the causes of teacher stress.

4) The identification of relationships if any between certain biographical variables and teacher stress.

5) The identification of relationships, if any between certain school variables and teacher stress.

6) The general acceptability of certain strategies, eg, in-service courses on discipline as ways of assisting the teacher in his role.

7) The existence of a 'counsellor' for experienced teachers.

Another aim could have been added to the above, its inclusion being integral to the satisfactory attainment of some of those listed. This is a reference to the construction of a 'stress-score', the

operationalisation of the concept 'teacher stress'. Although it was intended to make this stress-measure as valid a reflection of teacher stress as was possible it did seem likely that, given the possible diversity of stress responses, the selection of the components of this measure would still appear rather arbitrary. The question of a stress score will be discussed again in a subsequent chapter.

3.2 Objectives

It was possible at an early stage in the planning of the research to make certain decisions about the objectives which hopefully would not only clarify the aims but lead to their achievement. The following gives a preliminary indication of how the aims were translated into more meaningful terms.

a) Stress

The operationalisation of 'stress' was to be as a composite score of the individual's responses to certain questions. In order to realise a number of aims, eg, the degree of stress, there would have to be several categories of response to the questions. Section Four of the Questionnaire, later entitled 'School Absence and Your Present Feelings about Teaching', was to contain the questions which would make up the measure of stress.

b) The Causes of Teacher Concern and Worry

The third aim referred to the causes of teacher stress or the

'stressors'. In Section Three of the Questionnaire, later entitled 'Working Conditions of Concern to You', the teachers were asked about the 'causes of professional concern and worry' and not about the causes of teacher stress. This was in line with the policy of deliberately avoiding the use of the word stress. To arrive at the causes the subjects were to be offered a table of 'possible causes of professional concern and worry' and then asked to select four of them and rank them from '1' ro '4', '1' indicating the 'most important' cause to '4' meaning the 'fourth most important'. The use of this ranking procedure was felt to be consistent with ideas about stress which affirmed that stressors varied in their stress-inducing intensity. Provision was to be made for the respondent to add and rank their own suggestions.

c) The Biographical Variables

Section One of the Questionnaire, entitled 'Yourself' was to contain items the answers to which would provide biographical details. Sex, age, experience, position in school, and qualifications were to be the subjects of these items.

d) The School Variables

The variables regarding the school were to be of almost two kinds, those of an objective nature, eg, size, split site, and those of a more subjective character, eg, discipline, cooperation, supportiveness. These variables were to be embodied in the questions which formed Section Two of the questionnaire 'Your School'.

e) Strategies of Assistance

The format for the realisation of the sixth aim was to be basically the same as that for the third aim, that is, the provision of a table of strategies, with scope for additions, requiring selection and ranking. A leading question here is to what extent these strategies may be seen as kinds of coping strategies for reducing stress?

f) A Counsellor for Experienced Teachers

The 'School' section of the questionnaire was to contain a brief series of questions about the existence and use, actual and potential, of a 'counsellor' for experienced teachers - the latter's equivalent of a professional tutor for probationary teachers. The series of questions would also address itself to the teachers' willingness to discuss their problems and with whom.

3.3 Hypotheses

All of the hypotheses of this research were derived from professional experience and ideas in the research literature and were concerned with (a) the biographical details of the sample and (b) the characteristics of their schools. The remaining data was collected for more descriptive purposes.

3.3.1. Stress and the Teacher

1) Stress and Teacher-Sex

Previous research was divided as to whether males or females experienced more stress or dissatisfaction. For instance Start

and Laundry (1973) found no correlation between sex and job satisfaction and Kyriacou and Sutcliffe (1977b) found no relationship between teacher stress and sex. However, Cortis (1973) expressed greater dissatisfaction for males, Payne (1974) asserted sex differences in degrees of dissatisfaction and Buxton (1977) found that male teachers were more 'strained' than women teachers. Because of this dichotomy it was decided to examine for any relationship between stress and sex and to follow up, particularly Buxton's finding. Thus the hypothesis here was:

That male teachers would experience more stress than female teachers.

2) Stress and Age

Here again previous research was divided. Payne (1974) found age differences in degrees of dissatisfaction while Buxton (1977) claimed that those teachers between the ages of 35 and 44 years were worst affected by strain. However, Kyriacou and Sutcliffe (1977b) found no relationship between stress and age. Thus, the state of the field seemed to justify further investigation. The hypothesis was stated so that older teachers, with possibly greater experience, would be assumed to experience less strain:

That stress would decline as teacher age increases.

3) Stress and Years of Experience in Teaching

Once more Kyriacou and Sutcliffe (1977b) found little association between teaching experience and stress but Buxton claimed that the worst affected were those of 11 to 20 years experience. It was

decided to investigate and pursue the general idea of Simpson (1962; 1976) who had found less absence amongst older experienced teachers. Thus the hypothesis stated:

That more experienced teachers would experience less stress than their less experienced colleagues.

4) Stress and Position Held in School

This relationship has been little explored although Kyriacou and Sutcliffe (1977b) had found little association between stress and position held in school. However, the assumption was made that Departmental Heads and Pastoral Heads would have far more demanding responsibilities (Marland, 1972) than Assistant Teachers and that these may expose them to more stress. Thus the hypothesis was:

That Departmental Heads and Pastoral Heads would experience more stress than Assistant Teachers.

5) Stress and Professional Qualifications

Here again Kyriacou and Sutcliffe (1977b) found little assoication. In fact, there has been little research into this relationship and so the hypothesis was built around an assumption that there would be differences between trained and non-trained teachers. Edmonds (1967) had found a difference in probationary failure rate between trained and untrained graduates and Taylor and Dale (1971) had claimed that untrained graduate probationers were more likely to leave teaching within five years than their trained graduate colleagues. The hypothesis stated:

That untrained teachers would experience more stress than trained teachers.

6) Stress and the Discussion of Problems.

The hypothesis here was really built upon one of the notions of 'everyday psychology' which asserts that it is better to talk about one's problems and so help relieve them than inhibit them and so increase tension and frustration. Thus the hypothesis stated:

That those teachers who discuss their problems will experience less stress than those teachers who do not.

3.3.2 Stress and the School

1) Stress and the Size of School

As has been previously indicated there is not much research into teacher stress and its relationship with other factors and this observation applies here. However, Kyriacou and Sutcliffe (1977b) looked at teachers in schools of 900 - 1100 pupils and concluded that over a quarter of their sample saw teaching as either 'very stressful' or 'extremely stressful'. There is also other work which suggests that large schools alienate and depersonalise relationships, eg, Hinton (1974), Watts (1974), Dunham (1976). Consequently, the hypothesis stated:

That teacher stress will increase as the size of the school increases.

2) Stress and Social Priority Allowance

Payne's (1974) research into EPA teachers may have some bearing here. In her survey of EPA teachers and their comparative assessment with non-EPA teachers, of various aspects of their work, Payne concluded that any advantages which were thought to exist for EPA teachers were not sufficient to reduce teacher turnover, itself a possible indicator of stress (Dunham, 1976). It is possible to conceive of both EPA and SPA payments as 'stress' payments, considering the 'unfavourable' conditions of both EPA and SPA schools. The hypothesis stated:

That those teachers working in Social Priority Allowance schools would experience more stress than those teachers working in non-SPA schools.

3) Stress and Split-Site

Dunham (1976) quoted a split-site arrangement as an unsatisfactory working condition which could be a stress situation. The problems of movement, communication, and organisation could be greater in split-site schools than in non-split-site schools. Thus, the hypothesis stated:

That teachers who work in split-site schools will experience more stress than teachers who work in one-site schools.

4) Stress and Discipline

Many writers testify to the problems and demands of the teacher's

disciplinary role, eg. Caspari (1976), and Kyriacou and Sutcliffe (1978b) cited 'pupil misbehaviour' as a source of stress. The hypothesis stated:

That teacher stress will increase as discipline decreases.

5) Stress and Pupil-Cooperation

This line of enquiry is closely related to the previous one but does afford a neat distinction, ie, it is possible for pupils to be uncooperative but not ill-disciplined. In his research with primary school teachers, Pratt (1978) found that one of the areas from which stress arose was 'non-cooperative children'. The hypothesis stated:

That teachers in schools with 'uncooperative' pupils will experience more stress than those teachers in schools with 'cooperative' pupils.

6) Stress and the Headteacher's Management Style

A number of writers have emphasised the role of the Head and its effects on teachers, eg, Watts (1974), and Caspari (1976) has linked the Head's organisation of the school with the degree of stress experienced by teachers. Both Hinton (1974) and Dunham (1977a) have argued that increased staff involvement in decision making could bring about greater satisfaction. The hypothesis stated:

That teacher-stress will increase as the Head teacher's management style becomes more authoritarian.

7) Stress and the Supportiveness of the Head

It seems to be a vital part of the staffroom folklore that the Head should support his staff, particularly over questions of discipline and parents. This issue of supportiveness may be an element in the relations between Heads and teachers. In this context Lawrence's (1974) claim that the arbitrary behaviour of the Head can be a factor in teacher absence and turnover is relevant. A survey of Swedish teachers (1977) found that one of the main causes of stress was from the antagonism and difficulty of cooperating with Heads. Kyriacou and Sutcliffe (1978b) also found that the source of stress 'attitudes and behaviour of the headmaster' formed part of the greater factor 'poor school ethos'. Thus, the hypothesis stated:

That those teachers with Headteachers who they described as 'unsupportive' will experience more stress than those teachers with 'supportive' Head teachers.

8) Stress and Supportiveness of Staffs

Rudd and Wiseman (1962), Caspari (1976), Pratt (1978), and Kyriacou and Sutcliffe (1978b) suggest that the state of relationships amongst teachers may have a profound effect on the level of stress or dissatisfaction. It is assumed that the supportiveness of one another would be a natural element in good staff relations. The hypothesis stated:

That those teachers with 'unsupportive' colleagues will experience more stress than those teachers with 'supportive' colleagues.

4. THE QUESTIONNAIRE AND THE SAMPLE

4.1. Why a questionnaire?

The main research instrument was a questionnaire. This type of instrument was preferred for the following reasons:-

a) The respondents might feel better able to disclose personal information, such as this research required, when offered the 'anonymity' of a questionnaire than if confronted with a face-to-face situation which would have been the case if the technique of interviewing had been chosen.

b) The use of a questionnaire allowed a larger sample to be researched than would have been possible with interviews.

c) A questionnaire was likely to be more economical of time and expense than interviews.

d) Considering the fact that the principal researcher had no real experience of the method of interviewing, a technique requiring certain skills and fraught with potential bias (Oppenheim, 1966), the use of a questionnaire seemed to be more appropriate.

However, it should not be thought that the actual design of a questionnaire was considered to be a relatively easier matter than the design of an interview schedule. During the early months of 1978 the questionnaire was to go through serveral phases of alteration and a number of drafts were to be written and re-written

before the final version emerged (see Appendix A). The problems and disadvantages of questionnaires were made abundantly clear by Oppenheim (1966):

' ... the questionnaire has to be much simpler and no additional explanation can be given and no probes requested ... It also lacks the personal introduction of the research by the interviewer ... In an interview we have strict control over the order and sequence of the questions, and the respondent does not know what is coming; mail questionnaires are usually perused before being answered, so that respondents often skip questions or come back to them later. all of which may bias the responses .... By far the largest disadvantage of mail questionnaires, however, is the fact that they usually produce very poor response rates.'

Oppenheim also emphasised the importance of the wording of questions, 'leading questions and loaded words', embarrassing questions, and 'response sets', and his emphases apply particularly to this research.

4.2. The Construction of the Questionnaire

The questionnaire (See Appendix A) was composed of the following sections, in the following sequence:

1) Yourself

2) Your School

3) Working Conditions of Concern to You

4) School Absence and Your Present Feelings about Teaching

5) In-Service and Supplementary Assistance.

It was decided quite early in its design to entitle it 'Questionnaire for Experienced Teachers On Working Conditions'. It was felt that the inclusion of the word 'stress' in the title or in any part of the questionnaire might be too suggestive. The word 'stress' might also have been a barrier to the acceptance of the questionnaire, its completion and return. Therefore, at no point in the questionnaire did the word 'stress' appear. This concern was obviously not shared by either Kyriacou and Sutcliffe (1978b) or Pratt (1978) who both made use of the word 'stress'. The phrase 'working conditions' was included because it was deemed to be sufficiently broad to encompass those aspects of the work of teachers which had been selected for study.

4.2.1. The First Draft

The design of the questionnaire began in the early months of 1978. The first draft was completed by March, 1978. The items included were operationalisations of the research objectives, the latter deriving from a) the literary review, b) formal and informal conversations with teachers, and c) intuition! The respondents were to be allowed to select and rank four items from the tables in Section Three and Five of the questionnaire. This procedure was thought to reflect the variety and priorities attached to different stressors and forms of assistance by different individuals. It also maintained some consistency in 'reponse set'. Finally, the covering letter was

composed, with the guarantee of anonymity being emphasised. (See Appendix B).

4.2.2 The Second Draft

Following futher reading and dissussion some changes were made to the questionnaire and letter. The second draft was produced in April, 1978. Some particularly important changes were included in Section 2 of the questionnaire, the section concerned with 'Your School'. The changes involved the addition of items describing the 'general character' of schools. The items Section 2, 4a - 4d, derived from the Aston (1978) 'School Incidents Questionnaire' constructed in association with the National Association of School-masters - Union of Women Teachers. These items were included either because they contained concepts considered to be relevant to this research, eg,'discipline' (4a), 'pupil cooperation' (4b) or because they better expressed concepts already included, eg 'Headteacher's Management Style'.

One further item was added to the table in Section 3 and this referred to 'Lack of opportunity for inservice training, an educational 'bone of contention' at the time, and in the past, and so thought worthy of inclusion. Finally, some of the items in Section 5 seemed inappropriate, eg, 'reduced teaching load', 'improved accomodation, equipment, etc', especially as the main purpose of Section 5 was to identify subjects for in-service assistance. As a result, a further review of relevant literature was undertaken in order to produce additional items for Section 5.

4.2.3. The Third Draft

The third draft of the questionnaire was prepared in May, 1978. There were very few modification to Sections One and Two. However, Section Three, now entitled 'Working Conditions of Concern to You' and given a sub-title of 'Possible causes of professional concern and worry to teachers', had two items added to its table. The first was 'feelings of inadequacy as a teacher, eg, lack of skills, abilities'. This derived from Rudd and Wiseman's (1962) seventh ranked teacher 'dissatisfaction', 'feelings of inadquacy as a teacher'. Several teachers had expressed this feeling during discussions with the researcher. The second new item had also been mentioned during these discussions, and referred to 'Concern for pupil success or failure'. Further support for its inclusion came from Pratt (1978) who found 'Concern for children's learning' to be a stress area for primary school teachers. Also, Cobb (1973) had concluded from his studies that 'responsibility for others' was a stress factor.

Section Four of the questionnaire 'School Absence and Your Present Feelings About Teaching' had two changes made in it, but they were identical in character. The changes were to items 5 and 6 which concerned the degree of fatigue, 'physically' (item 5) and 'emotionally and mentally' (item 6), which the respondents associated with teaching. Originally, the subjects were offered a five-point scale of response but this was now thought

likely to lead to a 'regression to the mean' if the middle category of response was chosen by the majority. Therefore for both itmes 5 and 6, the subjects were asked to respond by using the scale 1 (low) to 4 (high).

Section Five of the questionnaire entitled 'In-Service and Supplementary Assistance', had six new items added to its table, so bringing the total to seventeen. These new items, and their direct or indirect source of derivation, included 'Motivating pupils' (Pratt, 1978); 'Specific skills and techniques, eg reading, immigrants, examination design, etc'. (Bolam, 1973); 'Crisis Case Studies on individual pupils' (Cane 1969) and 'Recent relevant educational research' (Cane, 1969).

4.2.4 The Pre-test

In May, 1978, it was decided that the questionnaire was ready for pre-testing. An opportunity for a pre-test then presented itself for at that time the principal researcher was attending a course on 'Ways of Reducing Teacher Stress' [organised by Birmingham University]. As the teachers attending the course were from secondary schools and employed in local education authorities not participating in the study, it was hoped that some of the course members would volunteer to complete the questionnaire. However none of the teachers volunteered to do so. It is difficult to conjecture why this should have been so. Certainly the reactions of two or three people seemed to intimate that some threat had been perceived! Following this set-back the principal researcher enlisted the cooperation of

thirteen teachers, from five different secondary schools, who were willing to complete the questionnaire.

The main result of this pre-test was that the questionnaire appeared to work well. None of the teachers encountered any really major problems in completing it and the general feeling was that the instructions were precise and that the ideas embodied in the items were clearly understood. Generally, the time taken to complete it was about fifteen minutes. A close examination of the completed questionnaires revealed several minor problems and some of these did lead to changes. All of the items in the table in Section Three, 'Working Conditions of Concern to You', except three ('Relations with parents', 'Involvement in unfamiliar curriculum situations' and 'Physical conditions, facilities, accomodation etc ') were ranked from 1 to 4. Also all of the items in Section Five's table 'In-Service and Supplementary Assistance', were ranked either 1 or 2 or 3 or 4.

The main two amendments were as follows:

a) A new item was added to the table in Section Three - 'Work in classroom insufficiently rewarded'. The core of this item had been 'suggested' in the 'Note' of Section Three by two teachers and was thus included. It does, anyway, seem to be a fairly frequently voiced opinion.

b) Item 1b of Section Four, was changed from 'For how many occasions/periods in the 1st 12 months have you been absent from school because of illness' to 'How many separate occasions in the last 12 months ...' This was rewritten because

several respondents had been confused about the word 'periods' no doubt associating it with 'school periods', ie lessons.

4.2.5 The Coding Manual

The construction of the coding manual for the questionnaire was begun at the time of the pre-test. When the deliberations consequent upon the pre-test were concluded, a second and final draft of the coding manual was prepared.

4.3 The Sample of Teachers

The sample was to be defined as follows:

Assistant teachers of five or more years of experience in full time occupation in 11 - 16 coeducational secondary schools, within the area of a particular Local Education Authority.

The nature of the sample implied a number of decisions as to exclusions and inclusions.

Headteachers were omitted on the grounds first, that the role of the Head had already received attention, eg, Peters, 1976; Jackson, 1977, and, secondly, that the behaviour and role performance of the Head may be stress producing for staff (Hoyle, 1969; Dunham, 1976, 1977a). Similar arguments applied to Deputy Headteachers.

Teachers of less than five years experience were excluded partly to allow some comparison of results with earlier research, ie Rudd and Wiseman (1962). Also, by concentrating on teachers of five or more years of experience, it was hoped to by-pass

the problems peculiar to entering teaching. The early professional socialisation would have been completed. Obviously, this argument applied particularly to probationary teachers. They were also excluded because they have been the focus of much recent attention, eg, Taylor and Dale, 1971; Hansam and Hetherington, 1976.

Part-time teachers were excluded because they were not the norm and would, therefore be unrepresentative if included in the sample. Neither would they be likely to get the same exposure to potential stress areas as the full time teachers.

The secondary sector was chosen for two reasons. Firstly, the researcher's own experience is in this sphere and secondly, it is in this sector that some of the problems one might expect to be associated with teacher stress are most manifested, eg, pupil indiscipline (Caspari, 1976). The restriction of the secondary sector to 11 - 16 coeducational comprehensive schools was justified because these schools were very much the norm within the Local Education Authority and, no doubt, within the country. Also, the inclusion of single-sex and 11 - 18 comprehensive schools would have introduced additional areas of investigation to such an extent that the research might have become too diffuse and imprecise.

4.4 The Involvement of the Local Education Authority

In May 1978 a formal approach for cooperation was made to the Local Education Authority selected for study.
A copy of the questionnaire, the draft being used for pre-testing,

and the covering letter were enclosed. The LEA was asked to grant permission for the questionnaire to be circulated to the designated sample, ie, full time teachers of five or more years experience in 11 - 16 coeducational schools.

Approximately one month later the LEA's Director of Education gave such permission but with two provisos. The first regarded an inclusion to the covering letter which made it abundantly clear that the Director of Education had given his personal permission for the teachers to be contacted by the researchers. The second proviso arose out of the Director's concern for the questions on Page 2 of the questionnaire relating to the Headteacher. The result was that the Director decided to write to the Headteachers of the schools involved, informing them of the research about to be implemented and suggesting that if they wished to receive a copy of the questionnaire or had any queries they should contact Professor Whitfield.

During the next few days the LEA supplied the researchers with a list of their 11 - 16 coeducational schools and the number of teachers in each school. However, the LEA was unable to say how many of those teachers were of 5 or more years experience. Also, the numbers submitted to the researchers made no distinctions between Headteachers, Deputy Headteachers and 'others' or between full time and part time staff. These two factors meant that a large number of questionnaires would have to be printed and that instructions for their distribution would have to be issued to each school. More importantly, these two factors had

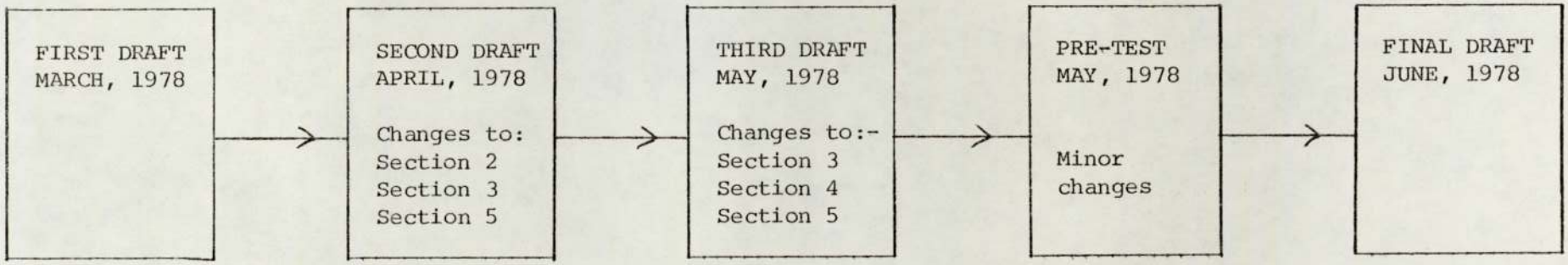
implications for the questionnaire itself. Eventually, it was decided to amend the questionnaire so that it could apply to all assistant tachers irrespective of their years of experience.

The final changes to the questionnaire included the deletion of the word 'Experienced' from the title of the questionnaire and from item 5a in Section Two and obvious alterations to the 'Age' and 'Years of Experience in Teaching' in Section One.

4.5. The Distribution of the Questionnaire

The distribution of the questionnaires took place during the first full week of July, 1978. In all, 847 questionnaires were distributed to 15 schools. Each school received a set of instructions for the distribution of the questionnaires the important instructions being that all full-time teachers whould receive a copy of the questionnaire but that this should exclude Headteachers and Deputy Headteachers. It was later discovered that these instructions clashed with those given by the LEA's Director of Education to the Heads of 11 - 16 Co-educational schools. The Director had stated that the questionnaires should only be distributed to teachers, of at least, 5 years experience. Consequently, some schools distributed the questionnaires according to the Director's instructions and others according to the researcher's. This confusion was to add to the difficulty of calculating a response rate.

Figure A: THE DEVELOPMENT OF THE QUESTIONNAIRE



5. DATA COLLECTION

The questionnaires were collected from schools at the end of the third full week of July, 1978. It was immediately apparent that the rate of response was low. A survey of the returned questionnaires revealed that very few problems had been encountered in completing them. Most of the respondents had understood what was required of them. Of the few problems that did arise, the majority were associated with the design of the questions. For example, one or two teachers felt that they could have 'ticked' two boxes of response instead of the stipulated one or have 'ranked' a few more of the items in Sections Three and Five. Generally, however, the questionnaire seemed to have worked quite well.

5.1 The Response of the Teachers

It is difficult to work out accurately the rate of response, because of the lack of data on the numbers of Heads, Deputy Heads, part time teachers and so on. However, it seems possible that the response rate was approximately 20%. Altogether 163 questionnaires were returned.

What explanations can be offered for this low rate of response? Several present themselves. Firstly, was the end of the Summer Term the wrong time to circulate the questionnaires? It had not been thought so, especially as external examinations would have relieved some pressures of time and tasks. If school reports

form filling and so on, were present at that time, no doubt they would have also been present at other times throughout the academic year. It was reasoned that the size of comprehensive schools would necessitate a staggering of reports etc, and that this problem, therefore, would possibly be encountered at whatever time was chosen. Even if other demands were prevailing, the questionnaire only required approximately 15 minutes for completion.

Secondly, was the low response rate due to the method of the research, ie, the use of a questionnaire? Certainly, one potential disadvantage of questionnaires, realised in this research, is their low rate of response (Oppenheim, 1966).

Thirdly, and this was intimated by a few respondents, were the items about the Headteacher, and the negative responses that they could invoke, too controversial? Where potential respondents afraid that any negative responses they made would be found out? Although completed questionnaires were to be placed in sealed envelopes, one or two respondents did express concern about the questionnaires being returned to and left in the School Secretary's Office, a traditional 'outpost' of the Headteacher.

Fourthly, had the LEA Director of Education's insertion into the covering letter about granting 'his' permission, created an impression, even a fear, that he might somehow get to know something about the responses of the teachers? In other words, could any

comments contained in the questionnaire be damaging either to the existing position or the future aspirations of the respondents?

Finally, and possibly most important was it the general character of the questionnaire which most teachers found disconcerting? It should not be forgotten that a number of the questions particularly in Sections Two, Three and Four of the questionnaire, did request the teachers to disclose their 'worries' and apprehensions. Some of the potential respondents may have seen these questions as impertinent and as casting doubts upon their levels of competence. Within the four walls of their classrooms, many teachers inhabit a private world, and they are wary of revealing thoughts and feelings which may reflect deterimentally upon their standards of performance. The reluctance of teachers to discuss their problems has been noted several times before, eg Caspari (1976) Laslett (1977).

An important point about the disappointing response rate concerns the possibility of bias. This is because the teachers who returned the questionnaires may not be representative of the original sample. This leads on to reservations about the validity of any generalisations made from the collected data.

5.2 The Reactions of Some Headteachers

The research questionnaire provoked several reactions from Head-teachers. One Head requested a copy of the questionnaire and

expressed an interest in the results of the research. Another Headteacher listed fourteen points,most of which tended to be critical of the questionnaire and the uses to which that Head felt its data would be put. A third Headteacher refused to distribute the questionnaires. Finally, the Secretary of the local Headteachers' Association forwarded a letter which noted certain reservations about the content and distribution of the questionnaire.

To a certain degree the reactions of the Headteachers were understandable. There were items in the questionnaire which referred to their styles of management and their relationships with their staffs. Probably, headteachers would feel threatened or betrayed if they were described as 'authoritarian' or 'unsupportive' or if the discipline of their schools was described as 'lax'. Possibly, Headteachers identify too much with 'their' schools and so see certain questions and statments such as those in the questionnaire, as personal insults. Perhaps this is why some Headteachers opened sealed envelopes containing blank questionnaires instead of following their Director of Education's request that they should contact the University if they wished to receive a copy of the questionnaire. It is interesting to conjecture to what extent the attitudes of the Headteachers affected the response rate of the teachers.

6. THE RESULTS OF THE INVESTIGATION

6.1 Measuring Stress

6.1.1. Introduction

The responses to the questions in Section Four of the Questionnaire 'School Absence' and Your Present Feelings about Teaching' were to be used to construct a composite measure of stress. It was thought that a composite measure would have more validity and reliability than a single item assessment.

The questions in Section Four provided data about the following:

1. Number of days absent in the last 12 months.
2. Number of separate occasions absent in the last 12 months.
3. Whether the respondents had ever 'gone sick'.
4. The respondents likelihood of leaving teaching.
5. Whether the respondents would choose teaching as a career again.
6. The degree of physical fatigue experienced by the respondents as a result of teaching.
7. The degree of emotional and mental fatigue experienced by the respondents as a result of teaching.

6.1.2. The Questions and Their Results

It will be remembered that 163 questionnaires were returned. However, after removing those teachers of less than five years experience the sample was reduced to 122. Therefore, the following results refer to 122 respondents.

Number of days absent

Table 2 shows the reponses to the first question of Section Four. 'Approximately how many days have you been off school through illness in the last 12 months?'

Absenteeism in general appears to be associated with stress. It has been conceptualised as a form of 'withdrawing' from a stress situation, as a 'flight into sickness' (Kearns, 1973). Teacher absence in particular was said by Dunham (1976) to be a common stress response. Sutcliffe and Kyriacou (1977a, 1978a) following a review of research stated that teacher absence was related to occupational stress. However, there was some concern about the reliability of a self reported measure of absenteeism; but because this was the only possible way of obtaining the information the item remained. It was decided that the importance of the content of the item balanced the doubts about its mode of collection.

It will be seen that just under three quarters of the sample have either not been absent at all or absent for one to three days. However, looked at another way it will be seen that 60.7 per cent of the sample have been absent and that 28.7 per cent have been absent for a total number of days ranging from at least 4 to over 12. This last percentage does seem to give cause for concern even though it is difficult to determine to what extent the absences are attributable to being a teacher.

Table 2 Number of days Absent in last twelve months

Days absent	Absolute Frequency	Relative Frequency
Not at all	48	39.3%
1 - 3	39	32.0%
4 - 6	14	11.5%
7 - 12	10	8.2%
Over 12	11	9.0%
No answer	0	0.0%
TOTAL	122	100.0%

Number of Occasions Absent

The second item of Section Four posed the question 'How many separate occasions in the last 12 months have you been absent from school because of illness?' The item was included because there have been suggestions that people under stress may tend to be absent frequently and for short periods. This is the 'repeater' phenomenon. Dunham (1976) has suggested that there is an association between teacher stress and frequent absence. Hargreaves (1978) referred to it as teachers 'playing truant'. Table 3 gives the various categories of response to the questions.

Table 3 Number of Occasions Absent in last twelve months.

Occasions absent	Absolute Frequency	Relative Frequency
None at all	47	38.5%
One	36	29.5%
Two	23	18.9%
Three	6	4.9%
Four	3	2.5%
More than four	5	4.1%
No answer	2	1.6%
TOTAL	122	100.0%
MEAN: 1.42	STANDARD DEVIATION	1.292

Note: There is a discrepancy of 1 between the 48 'Not at all' of table 2 and the 47 'None at all' here.

What is of note in Table 3 is that 30.4 per cent of the respondents have been absent on at least two occasions while 11.5 per cent have been absent due to ill-health on upwards of three occasions.

'Going Sick'

Table 4 provides data regarding the third question of Section Four, 'Have you ever 'gone sick' because you were 'tired of work', 'felt in need of a break', etc?' This item derives from Kyriacou and Sutcliffe's (1977a) distinction between physical illness absence and absence of a more psychological nature. It could be said to refer to

'casual' absences, even truancy. A survey in Sweden, reported in the 'Times Educational Supplement' (1977) found that a number of teachers admitted to 'going sick'. The idea of 'withdrawing' from a stress-situation,perhaps in order to help adjust to it (Simpson, 1962; 1976) was mentioned earlier. The question implies that those teachers experiencing stress may deliberately seek refuge in absence.

Table 4 shows that 18 per cent of the respondents admitted to 'going sick'. This almost amounts to one teacher in every five deliberately seeking a respite from teaching. Considering the loaded nature of the question and its request for a socially disapproved answer 18 per cent may be a modest response. Perhaps these two factors deterred other respondents from answering in the affirmative.

Table 4 'Have you ever 'gone sick'?'

Ever Gone Sick?	Absolute Frequency	Relative Frequency
No	100	82.0%
Yes	22	18%
No answer	0	0%
TOTAL	122	100%

Leaving Teaching?

The fourth question of Section Four of the questionnaire asked the respondents to respond to one of three statements about leaving teaching. The two statements which dealt with the 'possibility' and 'likelihood' of leaving teaching respectively had added the phrase 'if I can find suitable employment'. This was done because the time of the distribution of the questionnaire was one of limited employment and opportunity.

The item was adapted from Taylor and Dale's (1971) survey of probationers. Both Dunham (1976) and Hargreaves (1978) have suggested that leaving teaching is a response to stress. Kyriacou and Sutcliffe (1979) investigated this response and found that 23.5 per cent of their sample indicated that it was 'fairly' or 'very unlikely' that they would still be a teacher in 10 years time. Obviously there is a decided difference in saying that one is leaving teaching and actually doing so. Table 5 shows the responses to the three categories of question.

Table 5 Leaving Teaching?

Leaving teaching	Absolute frequency	Relative frequency
Not likely	90	73.8%
Possibly	19	15.6%
Very likely	11	9.0%
No answer	2	1.6%
TOTAL	122	100.0%

Table 5 shows that 24.6 per cent of the respondents are considering, in some degree, the possibility or likelihood of leaving teaching. This figure is remarkably similar to Kyriacou and Sutcliffe's (1979) finding of 23.5 per cent allowing, that is, the comparison of 'fairly' and 'very unlikely' with 'possibly' and 'very likely'. But what makes the figure of 24.6 per cent more disturbing is that it relates only to teachers of at least five years experience. Kyriacou and Sutcliffe's (1979) sample of 218 included the 78 respondents of 0 to 4 years experience whose mean for their question was higher than the other 'teaching experience' sub groups. Since intention to leave teaching appears to be greater for less experienced teachers (Taylor and Dale, 1971) the present finding of 24.6 per cent must be seen as slightly alarming. If brought to reality, it could mean the withdrawal of a large stock of experienced staff.

Choose teaching again?

The next item in Section Four of the questionnaire posed the question 'Would you choose teaching as a career again?' It was reasoned that respondents seriously dissatisfied with teaching would answer 'No'. In some way, this item was an extension of the previous question about leaving teaching and may even be seen as an unnecessary duplication. However, it was felt that it complemented that question and offered another opportunity to differently assess teacher-dissatisfaction. It could be argued that 'not choosing teaching again' is a more valid measure of

dissatisfaction than saying it is 'possible' or'very likely'that one will leave teaching. The latter implies doing something in the near future and this could for various reasons, be difficult whereas the former does not imply any forthcoming action just a reflection of a respondent's dissatisfaction even disillusionment Table 6 shows the responses of the sample.

Table 6 If Choose teaching again

If choose teaching again	Absolute Frequency	Relative Frequency
No	45	36.9%
Yes	75	61.5%
No answer	2	1.6%
TOTAL	122	100.0%

The table shows quite clearly that a little over one third of the sample would not choose teaching again. This seems a very high figure, indeed. This figure of 36.9 per cent also offers some credence to the arguments regarding the inclusion of this item, for it is almost half as great again as the 24.6 per cent found in Table 5.

Physical and Emotional Fatigue

The last two questions dealt with different aspects of fatigue, first physical and than emotional and mental. The respondents were twice asked to estimate from 1 (low) to 4 (high) how fatiguing they found teaching.

Kearns (1973) has argued that the frequent repetition of stress and strain may produce fatigue. (Selye (1956) has a 'stage of exhaustion' as part of his 'General Adaptation Syndrome'. Graham-Bonnalie (1972) emphasised fatigue as a form of stress. So the association between stress and fatigue is quite clear. With regard to teachers and fatigue, Hargreaves (1978) was in no doubt that teaching brought its 'own special emotional exhaustion' and Kyriacou and Sutcliffe (1978b) found that one of the most frequent symptoms of stress reported was 'exhaustion'.

Table 7 provides the data for the physical fatigue item

Table 7 Physical fatigue from Teaching

Physical fatigue	Absolute Frequency	Relative frequency
One	23	18.9%
Two	34	27.9%
Three	36	29.5%
Four	29	23.7%
No answer	0	0.0%
TOTAL	122	100.0%
MEAN 2.582	STANDARD DEVIATION	1.051

If one assumes that an estimate of '3' or '4' is equal to 'very' or 'extremely' then it is clear that a little over half of the sample, 53.3 per cent, do find teaching, at least very physically fatiguing. It then becomes a matter of conjecture as to whether this is so because teaching is actually a physically tiring job or whether it is so because of the other characteristics of teaching, eg, psychological. The latter explanation implies that physical fatigue is the manifestation of other concerns.

The question concerning emotional and mental fatigue was probably the questionnaire's most subjective measure of stress. It is probably a truism that most people think of stress in these terms. Table 8 shows the responses of the sample.

Table 8 Emotional Fatigue from Teaching

Emotional and Mental fatigue	Absolute Frequency	Relative Frequency
One	6	4.9%
Two	18	14.8%
Three	34	27.9%
Four	64	52.5%
No answer	0	0.0%
TOTAL	122	100.0%
MEAN 3.279	STANDARD DEVIATION	0.893

The high mean of 3.279 is obviously explained by the extremely high number of respondents (98) rating teaching as either '3' or '4'. These results would certainly confirm one part of Hargreaves's (1978) view that while 'Other professions get tired, teachers become exhausted'. That a little over half of the sample, 52.5 per cent, should estimate teaching as highly or extremely emotionally fatiguing (score 4) is, to say the least, remarkable.

In conclusion it can be said, in general that the respondents find teaching to be a very demanding occupation. At least half of them experienced a large amount of physical fatigue while over three quarters of them are subject to serious emotional and mental fatigue. These findings are all the more striking because they apply to experienced teachers and not to probationers or less experienced teachers. Taylor and Dale (1971) found that 37 per cent of their probationer sample complained of fatigue. In the light of their results the present findings are indeed striking. It would appear that being experienced in teaching does not reduce the likelihood of serious fatigue, that in this respect the job does not get easier with the passage of time. The important question is why?

	Days Absent	Occasions Absent	Ever gone Sick	Leave Teaching	Choose Teaching Again	Physical Fatigue	Emotional Fatigue
Days Absent		.7723 S=.001	.0703 N.S.	.2501 S=.01	.0429 N.S.	-.1049 N.S.	-.0461 N.S.
Occastions Absent			.2449 S=.01	.1782 N.S.	-.0028 N.S.	-.0160 N.S.	.0495 N.S.
Ever gone Sick				.2117 S=.05	.1203 N.S.	-.0059 N.S.	.2163 S=.05
Leave Teaching					.4244 S=.001	.0294 N.S.	.2901 S=.01
Choose Teaching Again						.2159 S=.05	.3095 S=.001
Physical Fatigue							.3417 S=.001
Emotional Fatigue							

S = Significant N.S. = Not Significant

Table 9: Pearson Correlation Matrix

6.1.3. THE STRESS SCALE

6.1.3.1. Pearson Correlation Matrix

As a first step in the development of a stress scale a Pearson Correlation Matrix was constructed. Table 9 shows the correlations and significance levels for 116 respondents, six of the sample having been withdrawn because they had not supplied responses to certain items in Section Four of the Questionnaire. Twenty one correlations were calculated and ten were found to be significant. All of those ten were positive correlations and to be expected given the logic of the items.

6.1.3.2 The Stress Scale

The Pearson Correlation Matrix suggested combinations of variables which might provide a valid and reliable stress scale. There then followed a series of attempts to construct such a scale. During this process variables were omitted, reinstated, and weighted in relation to each other.

The stress scale finally decided upon included the following variables:-

a) Number of days absent.

b) Number of occasions absent.

c) Ever gone sick.

d) If leave teaching.

e) If choose teaching again.

The responses to each of these items were scored exactly as they had been coded with the exception of the item 'If choose teaching again'. Here the codings were reversed so that a response of 'yes' scored '0' and a response of 'no' scored '1'.

The Cronbach alpha reliability coefficient for the 5 item scale was .62, which seems reasonably satisfactory for a short scale. It needs to be remembered that one or two of the items of Section Four of the questionnaire had been included mainly on the basis of intuition and that the idea of a scale to assess teacher stress was, and indeed, still is, a comparatively new and untried concept. In fact, a higher reliability .65, was obtained by omitting the variable 'If choose teaching again' from the stress scale. However, it was reasoned that the minimal rise in reliability was not worth

the loss in the validity of the scale.

Concerning the nature of the scale, there was an emphasis on the behavioural aspects of stress, eg, absence. In fact, it could be said that the scale, in total, is an 'indirect' assessment of stress, that there is no 'direct' or truly subjective assessment of stress. Probably the variable 'Ever gone sick' comes nearest to being a subjective assessment. The inclusion of one or both of the 'fatigue' variable 'emotional fatigue' and 'physical fatigue' in the scale would have gone some way to remedying this.

Since this was not so, an alternative approach was decided upon - that of Pearson Correlations between the scale and (1) 'physical fatigue' (2) 'emotional fatigue' and (3) 'physical fatigue' and 'emotional fatigue' combined. It was hoped that there might be some association between the 'indirect' stress scale and the more subjective items of Section Four of the questionnaire. The correlation coefficients were - .0110 for the scale and physical fatigue, .1510 for the scale and emotional fatigue, and .0783 for the scale and physical fatigue and emotional fatigue combined. None of the correlations were significant.

6.2 THE TEACHERS AND STRESS

6.2.1 Introduction

It will be remembered that 'stress' was eventually operationalised as the composite score of responses to question which were concerned with -

1. The number of days absent (scored 0 - 4)
2. The number of occasions absent (scored 0 - 5)
3. Whether the respondent had ever'gone sick' (scored 0 - 1)
4. The degree of likelihood of leaving teaching (scored 0 - 2)
5. The choice of teaching as a career again (scored 0 - 1).

By attaching a score to each category of response to each question it was found the stress scores could range from the minimum of 0 to the maximum of 13.

Two of the aims of the research centred upon (1) the proportion of teachers who could be said to be experiencing stress, and (2) the proportion of teachers who could be said to be experiencing different degrees of stress. To facilitate an investigation of these two aims a 'codebook' analysis of stress was undertaken for the 116 teachers who had provided responses to all five questions. Table 10 gives the relevant statistics.

Table 10 The Distribution of Teacher-Stress Scores

Stress-Scores	Number of cases	Percentages of cases
0	19	16.4
1	14	12.1
2	27	23.3
3	15	12.9
4	8	6.9
5	8	6.9
6	8	6.9
7	5	4.3
8	6	5.2
9	1	0.9
10	3	2.6
11	1	0.9
12	-	-
13	1	0.9
TOTAL	116	100.0%

Mean:	3.267	Standard Error:	0.265
Standard deviation:	2.851	Variance:	8.128
Minimum Score:	0	Maximum Score:	13

6.2.2. The Prevalence of Teacher-Stress

The determination of the percentage of teachers who could be said to be experiencing stress required a decision to be made as to where in the range of stress scores the 'cut off' line should be drawn, ie, that line below which a teacher could be said to be experiencing no stress but above which he could be said to be experiencing stress. The arbitrary nature of this decision will not need emphasising. However, there were one or two factors

taken into consideration which lessened the impact of this arbitrariness. Firstly it seemed obvious to attach a higher score to an adverse response eg, saying 'yes' to having 'ever gone sick' rather than to a neutral or positive one. Secondly, having done this it seemed reasonable to sum up the minimum adverse responses in order to arrive at a score which could be regarded as the cut off point for stress.

Generally the minimum adverse response to an item presented itself. For example, saying 'yes' to having 'ever gone sick', affirming the 'possibility' of leaving teaching, and responding 'no' to 'Would you choose teaching as a career again?'. However the minimum adverse responses to the questions about number of days absent and number of occasions absent did not present themselves, so clearly. In the case of the 'days absent' item, it was decided that the response '4 - 6' days absent would count as the minimum adverse response. Some justification for this was sought in the finding that 71.3% of the respondents had either never been absent or for '1 - 3' days. Thus, being absent for '4 - 6' days was above average.

As for the 'number of occasions absent' item the minimum adverse response was to be 'three'. This was decided upon because three occasions seemed to be a fair reflection of frequent absence as well as seeming more consistent with '4 - 6' days absent, ie, the idea of frequent absences of limited duration being indicative of stress (Dunham, 1976). Also 'three' occasions absent was not the typical response of the sample. In fact, 88.3% of the respondents

had either never been absent or absent once or twice.

The completion of these processes enabled the cut off point in the range of stress scores to be stated. It was to be the score of 8. Thus, anyone scoring 8 or above would be regarded as experiencing stress. Table 10 shows that 12 teachers had scores of 8 or above. They represented 10.5% of the sample.

Having decided the overall proportion of teachers who could be said to be experiencing significant stress, it now had to be decided whether some teachers were experiencing a greater degree of stress than others. This necessitated the establishment of another and higher cut off point in the range of stress scores.

Generally, this was achived by moving to the next adverse response to an item, over and above the one used to arrive at the 'stress' cut off point of 8. Thus, the adverse response for days absent was '7 - 12' and for the likelihood of leaving teaching it was 'very likely'. The adverse reponses for the number of occasions absent, 'ever gone sick', and 'choose teaching again' remained the same as they had been for the original stress score. This was so because the items either did not possess a further adverse response ('ever gone sick' and choose teaching again') or because the original adverse response was thought to be both appropriate and satisfactory for here also.

The cut off point for those scores at or above which a teacher could be said to be experiencing greater stress than his or her already stressful colleagues was to be 10. This meant that there were 5 teachers or 4.4% of the sample, who could be spoken

of in terms of extreme stress.

6.2.3 Stress and the Teacher Variables

The variables embodied in Section One of the questionnaire entitled 'Yourself' were separately analysed in relation to stress, as previously defined,by a one-way analysis of variance.

The variable measured by item 6a of Section Two of the questionnaire asking if teachers discussed their problems, was also subjected to a one-way analysis of variance and has been included here because it relates more to the individual teacher than to the school. The latter was the general theme of Section Two of the questionnaire.

1. Stress and Teacher-Sex

Table 11 shows the results of a one-way analysis of variance between stress and male and female teachers.

Table 11 Stress and Teacher-Sex

Source of Variation	Sum of squares	degrees of freedom	Mean Square	F
Between groups	0.7512	1	0.7512	0.0917
Within groups	933.9643	114	8.1927	
TOTAL	934.7155	115	8.1927	

Since the F ratio does not exceed the critical value of F at the $P < .05$ significance level the hypothesis that male teachers would be more stressed than female teachers does not receive support here.

2. Stress and Age

The second hypothesis that stress would decline as the age of the teacher increases, is also not supported. There were no significant differences between the age-groups 25 - 29, 30 - 39, 40 - 49 and over 50. Table 12 provides the results.

Table 12 Stress and Teacher-Age

Source of variation	Sum of squares	degrees of freedom	Mean Square	F
Between groups	45.2433	3	15.0811	1.8890
Within groups	889.4722	112	7.9417	
TOTAL	934.7155	115		

3. Stress and Years of Experience in Teaching

Table 13 shows the results of this analysis, and that the null hypothesis of no significant differences between the groups cannot be rejected, for the F ratio does not exceed the necessary critical value of 2.68. The categories of years of experience in teaching were 5 - 9, 10 - 19, 20 - 29, and over 30. Consequently, the hypothesis that more experienced teachers would feel less stressed is not supported.

Table 13 Stress and Years of Experience in Teaching

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	26.1122	3	8.7041	1.0729
Within groups	908.6033	112	8.1125	
TOTAL	934.7155	115		

4. Stress and Position held in School

The positions examined included Assistant Teacher, Department/Faculty Head, and House/Year(s) Head. The hypothesis was that Department/ Faculty Heads and House/Year(s) Heads would be more stressed than Assistant Teachers, that stress would increase with additional responsibilities. However, this particular hypothesis was not supported. In fact, the results showed the trend to be the reverse. The Assistant Teachers had a mean stress score of 4.30, the Department/Faculty Heads of 3.14, and the House/Year(s) Head of 2.21. The differences between the groups were significant at the $P < .05$ level.

Table 14 Stress and Position Held in School

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	64.5182	2	32.2591	4.1827
Within groups	848.3667	110	7.7124	
TOTAL	912.8749	112		

5. Stress and Professional Qualifications

The categories of professional qualifications included for investigation were A Teacher-Training Course, Degree and Teacher-Training, Degree and no Teacher-Training and Unqualified. In the final analysis there proved to be no cases of unqualified teachers. Table 15 provides the results for this analysis. The hypothesis that untrained teachers would experience more stress than trained was not supported. Interestingly, it was the Degree and no Training category which had the lowest mean stress scores of 1.75, just about half that of the other two categories.

Table 15 Stress and Professional Qualifications

Source of Variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	10.0315	2	5.0157	0.6129
Within groups	924.6840	113	8.1830	
TOTAL	934.7155	115		

6. Stress and If Discuss Problems

The hypothesis here was that those teachers who said 'yes' and so disclosed any worries that they had about school would be less stressed than those who answered 'no' and so kept their problems to themselves. However, in the analysis there was found to be no significant difference between the groups and the hypothesis was not supported. Table 16 gives the results.

Table 16 Stress and If Discuss Problems

Source of Variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	1.0095	1	1.0095	0.1232
Within groups	933.7061	114	8.1904	
TOTAL	934.7156	115		

6.2.4. Stess and the School Variables

A one-way analysis of variance was also applied between stress and the variables represented by Section Two of the questionnaire entitled 'Your School'.

1. Stress and Size of School

Table 17 shows the results of this analysis. The value of the F ratio was not significant and so the hypothesis that teacher-stress would increase with an increase in the size of the school was not supported. The highest mean stress score of 3.66 was for the category '701 to 900 pupils'. The other categories were 'up to 700' (1.33), '901 to 1100' (3.04), '1101 to 1300' (2.84), and 'over 1301' (3.57).

Table 17 Stress and the Size of the School - 1

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	23.6855	4	5.9214	0.7215
Within groups	911.0300	111	8.2075	
TOTAL	934.7155	115		

2. Stress and Social Priority Allowance

The hypothesis was that those teachers working in Social Priority Allowance schools would be more stressed than those teachers working in non SPA school. Table 18 provides the results. The F value was not significant and so the hypothesis was not supported. In fact, it was the teachers in non SPA schools who had the higher mean score of 3.34 as against 3.08.

Table 18 Stress and Social Priority Allowance

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	1.6517	1	1.6517	0.2018
Within groups	933.0638	114	8.1848	
TOTAL	934.7155	115		

3. Stress and Split Site

The F value for this analysis did not reach significance. Thus, the hypothesis that those teachers who work in schools which are

split site would be more stressed that those teachers who work in one site schools was not supported. An examination of the mean scores showed that the split site teachers had the lesser of the two mean scores, 3.00 as against 3.50. Table 19 gives the results.

Table 19 Stress and Split Site

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	7.2155	1	7.2155	0.8869
Within groups	927.5000	114	8.1360	
TOTAL	934.7155	115		

4. Stress and Discipline

The hypothesis was that teacher stress would increase as discipline moved from 'firm' to 'tolerant' to 'lax'. Table 20 shows the results. The value of F was significant at the $P < .05$ level and so the null hypothesis of no significant differences between the groups was rejected. A reading of the mean stress scores shows them increasing in the expected direction with 'firm' being 2.17, 'tolerant' 3.42, and 'lax' 4.8. Thus the teachers in schools whose discipline they describe as 'lax' appear to be more stressed than their colleagues who teach in schools of 'firm' or 'tolerant' discipline.

Table 20 Stress and Discipline

Source of Variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	70.2175	2	35.1087	4.4847
Within groups	861.1454	110	7.8286	
TOTAL	931.3629	112		

5. Stress and Cooperative/Uncooperative Pupils

Table 21 provides the results of this analysis. The hypothesis was that those teachers in schools where the pupils were described as 'uncooperative' would be more stressed than those teachers in schools where the pupils were described as 'cooperative'. As the F value failed to reach the necessary critical values of 3.92 the hypothesis was not supported. However, it may be noted that there was a trend towards significance, as teachers with 'uncooperative' pupils had a higher mean score than those teachers with 'cooperative pupils' 4.153 as against 3.05.

Table 21 Stress and Cooperative/Uncooperative Pupils

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	25.2439	1	25.2439	3.2164
Within groups	886.8778	113	7.8485	
TOTAL	912.1217	114		

6. Stress and the Headteacher's Management Style

The three categories of Headteacher's management style were 'democratic' 'consultative' and 'authoritarian'. The hypothesis stated that teacher stress would increase as the Headteacher's management style moved from 'democratic' to 'authoritarian'. As the value of F did not reach signficance the hypothesis was not supported. Table 22 shows the results.

Table 22 Stress and the Headteacher's Management Style

Source of variance	Sum of Squares	Degrees of Freedom	Mean Square	F
Between groups	18.0563	2	9.0282	1.0730
Within groups	908.7184	108	8.4141	
TOTAL	926.7747	110		

7. Stress and the Supportive/Unsupportive Head

The hypothesis was that teachers with Headteachers who they described as 'unsupportive' would be more stressed than teachers with Headteachers who they described as 'supportive'. Table 23 shows that the value of F was 7.4546 and this proved to be significant at the $P < .01$ level. Thus, the hypothesis was supported. The mean scores for the two groups were 2.92 for 'supportive' Heads and 4.696 for 'unsupportive' Headteachers.

Table 23 Stress and the Supportive/Unsupportive Head

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	57.7587	1	57.7587	7.4563
Within groups	875.3370	113	7.7463	
TOTAL	933.0957	114		

8. Stress and the Supportive/Unsupportive Staffs

Table 24 provides the results for this analysis. The F value proved to be significant at the $P < .01$ level. The null hypothesis of no significant differences betweeen the groups was rejected. Thus, it would appear that teachers who feel that their colleagues are 'unsupportive of one another' are more stressed than those teachers who feel that their colleagues are 'supportive of one another'.

Table 24 Stress and Supportive/Unsupportive Staffs

Source of variation	Sum of squares	Degrees of freedom	Mean Square	F
Between groups	149.7250	1	149.7250	21.8528
Within groups	774.2228	113	6.8515	
TOTAL	923.9478	114		

The mean score for the 'unsupportive' group was 5.94 whilst that for 'supportive' was 2.80.

6.3 THE CAUSES OF TEACHER-STRESS

In Section Three of the questionnaire each respondent was asked to select from the table the four 'most important items which in relation to your experience give you cause for concern'. The respondents were further asked to rank their chosen items from '1' (Most important) to '4' (Fourth most Important).

Table 25 shows the total number of occasions that each item was ranked either 1 or 2 or 3 or 4 by the 122 respondents. For example, item 1, 'feelings of professional inadequacy, eg'lack of skills' was ranked '1' by 5 of the 122 respondents; ranked '2' by 6 respondents ranked '3' by none of the respondents and ranked '4' by 4 of the 122 respondents. It will be observed that table 25 has an item 23, 'Inadequacies of promotion system', whereas the table in Section Three of the questionnaire finished at item 22. Item 23 was constructed as a result of coding the suggestions offered by four respondents in the 'other' category.

The figures in the right-hand 'Total' column reflect the total number of occasions that an item was ranked from 1 to 4. This does, in effect, provide a crude but useful way of arriving at an overall ranking for the items in the table. Thus, in terms of most times ranked, the top four items were as follows:

1. Insufficient time, eg teaching, clerical duties, marking.
2. Too much expected of teachers, eg. social work, pastoral care on top of academic work
3. Large schools
4. Physical conditions, facilities, accommodation, etc.

Table 25

Section 3: WORKING CONDITIONS OF CONCERN TO YOU

Please select from the Table below the four most important items which, in relation to your experience, give you cause for concern. Please rank from '1' (Most Important) to '4' (Fourth Most Important).

Possible causes of professional concern and worry to teachers

Item	*Number of times ranked*				*Total*	*Overall rank*
	1	*2*	*3*	*4*		
1. Feelings of professional inadequacy (eg lack of skills).	5	6	-	4	15	13=
2. Relations with parents	3	1	1	1	6	20
3. Status of self and/or subject in school	2	4	6	3	15	13=
4. Large schools	21	5	8	3	37	3
5. Inadequate job definition	2	5	1	4	12	16
6. Relations with other teachers	1	2	4	-	7	18=
7. Headteacher's style of decision making	10	1	5	7	23	9=
8. Insufficient time, eg teaching, marking	17	19	12	8	56	1
9. Concern for pupil success or failure	8	5	9	5	27	6=
10. Split site schools	9	5	4	8	26	8
11. Involvement in unfamiliar curricular situations	1	-	1	-	2	23
12. Physical conditions, facilities, accommodation, etc	6	11	10	5	32	4
13. Lack of opportunity for inservice training	-	3	7	5	15	13=
14. Distribution of classes, eg, too many 'low' ability forms	-	3	2	2	7	18=

15. Covering lessons for other teachers	7	2	8	11	28	5
16. Contradictory expectations of teachers, eg, from Head, pupils	1	1	3	5	10	17
17. Large classes	4	4	10	3	21	12
18. Relations with Headteacher	-	3	-	1	4	21=
19. Maintaining discipline with classes and individuals	4	8	2	9	23	9=
20. Dealing with groups of wide ability range	5	7	10	5	27	6=
21. Too much expected of teachers, eg, social work	7	14	6	13	40	2
22. Work in classroom insufficiently rewarded	3	5	6	8	22	11
23. Inadequacies of promotion system	-	2	-	2	4	21=
NO ANSWER	6	6	7	10		
TOTAL	122	122	122	122		

However, it is clear that the item 'Insufficient time, etc' is by far and away the dominant cause of 'worry and concern' to a lot of the teachers in the sample, being ranked by over 40% of them. This is substantiatedto some degree, by noting that the item, 'Covering lessons for other teachers' is ranked five. 'Covering' for other members of staff would obviously involve a loss of 'free periods'. Also it may be surmised as to what extent the second overall ranked item 'Too much expected of teachers',etc. is also an indication of 'insufficient time'.

What the remainder of the Table 25 shows quite clearly is that there, is a fair degree of variety in the causes of 'concern and worry' experienced by the teachers in the sample. Apart, perhaps, from the first four overall- ranked items, there is no clear and decisive pattern. A large majority of the items received some sort of support. This would seem to suggest that the nature of what causes worry is intensely personal, that is, that what provokes concern in one teacher may not have the same effect on another teacher. There appears to be an element of variety in the individual teacher's response to his/her working conditions.

Note: In order to verify the overall rankings another procedure was applied to the original rankings. By this second procedure, which took account of the ranking positions, the number of occurences within a particular rank were multiplied by 'x', where x for rank 1 equalled 4, for rank 2 equalled 3, for rank 3 equalled 2, and for rank 4 equalled 1. These scores were then added together. When each item had been given a score, they were placed in an order of merit. Thus applying this method to item 1, 'feelings of professional

inadequacy ...', a score of 42 is obtained, ie, rank 1:5 x 4 = 20; rank 2: 6 x 3 = 18; rank 3; 0 x 2 = 0; rank 4; 4 x 1 = 4.

A comparison was then made between the overall rankings arrived at by this method and those shown in the last column of Table 25. The main results were that seven items had the same overall ranking while ten varied by plus or minus one position. Considering these results it was decided that the first method was adequate.

6.4 IN-SERVICE AND SUPPLEMENTARY ASSISTANCE FOR TEACHERS

In Section Five of the questionnaire the respondents were asked to select the four most important items in which further training, courses, discussion, provision, etc would be helpful to them in their roles as teachers. As with the table in Section Three of the questionnaire, the respondents were asked to rank their selected items from '1' (Most Important) to '4' (Fourth Most Important).

Table 26 shows the total number of occasions that each item was ranked either 1 or 2 or 3 or 4 by the 122 respondents. The figures in brackets in the right hand 'Total' column reflect the total number of occasions that an item was ranked from 1 to 4 and, as with Table 25 for the Section Three data this afforded a crude but useful way of constructing an overall ranking of the items. Thus, the top Four items were as follows:-

1. Training for further responsibilities, eg Head of Department, Pastoral Head, etc.
2. Intellectual stimulation and refreshment (eg full time Master's course).
3. = Class managagement2, eg presentation of material to varied age ranges and ability groups.
4 = Motivating pupils.

Clearly, the item, 'Training for further responsibilities, etc' was

Table 26

SECTION 5: IN-SERVICE AND SUPPLEMENTARY ASSISTANCE

Please select from the Table below the 4 most important items in which further training, courses, discussion, provision, etc, would be helpful to you in your role as a teacher. Please rank as before, from '1' the most important to '4' the fourth most important.

Item	*No of times ranked*				*Total*	*Overall rank*
	1	*2*	*3*	*4*		
1. Class management, 1 eg discipline behaviour	16	6	5	1	28	8
2. Class management, 2 eg, presentation of material	11	13	9	5	38	3=
3. Staff relationships	1	2	3	6	12	15
4. Training for further responsibilities, eg, Head of Department	21	18	13	12	64	1
5. Professional Tutors, counselling, etc to assist teachers with problems	1	7	7	5	20	11=
6. Teacher participation in school decision making	7	3	11	10	31	5
7. Personnel management for Heads and Deputies	7	6	3	11	27	9
8. Teacher parent communication, contact, etc	3	10	6	5	24	10
9. Defining and assessing the work of a teacher	6	5	7	2	20	11=
10. Television playback and analysis of my lessons	-	-	3	4	7	16
11. Motivating pupils	12	10	9	7	38	3 =
12. Skill modelling, ie, watching other teachers cope	-	1	-	2	3	17

13. Specific skills and techniques, eg reading, immigrants	7	6	7	10	30	6
14. Crisis case studies on individual pupils	-	5	6	4	15	14
15. Recent relevant educational research	3	7	11	7	28	7
16. Unqualified teachers' 'aids'/ancillary staff	1	7	3	8	19	13
17. Intellectual stimulation and refreshment (eg full time Master's course)	18	6	10	14	48	2
NO ANSWER	8	10	9	9		
TOTAL	122	122	122	122		

dominant being selected by approximately 56% of the teachers in the sample, and probably representing a fairly strongly felt 'career' need. Following this item in ranked order are about nine others which command between 20% - 40% of the support of the teacher sample. These nine items ranked from 2 to 10, encompass a wide variety of the aspects of the role of the teacher, ranging from classroom skills, eg, lesson content, motivation, to the wider issues of participation and management. So, as with the causes of 'concern and worry' it would appear that there is an element of variety at work, but this time in the requirements of teachers for in-service . Different teachers would like to receive different forms of assistance.

Two further comments can be made. Firstly, that several of the items ranked in the top ten refer to essential teacher skills and abilities, eg discipline, presentation, motivation. Does this mean, then, that the teachers in the sample feel their present skills to be inadequate or out of date? Is it a judgement of the worth of teacher training and available in-service courses? Second, how valid would it be to infer from this Table's results that an item selected as a topic for assistance is, in effect, a reflection of an aspect of the role of the teacher which provokes either problems or dissatisfaction or 'concern and worry'? In other words, to what extent was the table in Section Five of the questionnaire another form of the table in Section Three, the latter having dealt specifically with causes of 'concern and worry'?

This point is raised because of an apparent inconsistency between the responses to the 'discipline' item of Section Three's table and the responses to the 'discipline' item of Section Five's table (' Class Management 1'). In the former only four teachers ranked 'Maintaining discipline ...' as '1' for 'worry and concern' whereas in the latter sixteen teachers ranked 'Class Management 1 ...' as '1' for inservice assistance. Is it right to suggest, if only for questions concerning the delicate issue of discipline, that more insights may be gained into the causes of teacher worry and concern by adopting an indirect approach rather than by tackling the matter head on?

6.5. A 'COUNSELLOR FOR EXPERIENCED TEACHERS

6.5.1 The Provision of a Teacher Counsellor

Items 5a, 5bi, 5bii and 5c of Section Two of the questionnaire sought information regarding the formal provision by the school of a 'person(s)' with whom experienced teachers could discuss in confidence their professional problems, ie, a 'teacher counsellor'.

Table 27 shows whether in fact such a provision was made by the schools.

Table 27 The Provision of a Teacher Counsellor

	Absolute Frequency	Relative Frequency %
No	102	83.6
Yes	20	16.4
TOTAL	122	100.0

Thus, approximately five sixths (83.6%) of the sample claimed that no such provision was made in their schools whilst one-sixth claimed that such a 'person(s)' did exist in their schools.

6.5.2. The Position, Title and Scale of the Teacher Counsellor

The respondents who answered 'Yes' to the existence, in their schools,of such a teacher counsellor, were then asked to supply information concerning that person's position, title, and scale of post, if known.

Table 28 shows the various positions which the teacher counsellors held. It will be seen that Deputy Headteachers are usually given the task of assisting teachers with professional problems.

Table 28 The Position of the Teacher Counsellor

Position	Absolute Frequency	Adjusted Frequency %
Head	3	16.7
Deputy	12	66.7
School Section Head	1	5.6
Other	2	11.1
No response	2	-
TOTAL	20	100.0

For purposes of clarity, the 'School Section Head' could have been Head of Lower or Middle or Upper School. The coding

allowed for such positions as Department or Faculty Head, House or Year Head, School Counsellor (for pupils), Teacher Counsellor, and Professional Tutor, as well as those noted in Table 28.

Table 29 illustrates the answers given by the respondents when asked for information about the actual title given to the person with whom teachers could discuss their professional problems. Although this item may have caused confusion with the 'position' item, it was included to ascertain whether in fact the titles 'Professional Tutor' or 'Teacher Counsellor' were being used by the schools concerned.

Table 29 The Title of the Teacher Counsellor

Title	Absolute Frequency	Adjusted Frequency %
Other	10	100.0
No response	10	-
TOTAL	20	100.0

As Table 29 shows the titles were not being used.

The respondents were next asked to indicate the 'scale of post' of their teacher counsellors.

Table 30 The Scale of Post of the Teacher Counsellor

Scale	Absolute Frequency	Adjusted Frequency %
Scale 3	1	8.3
Scale 4	2	16.7
Senior teacher	1	8.3
Deputy	7	58.3
Head	1	8.3
No response	8	-
TOTAL	20	100.0

As with Table 28 most teacher counsellors appear to hold Deputy Headships.

Taken as a whole Tables 28, 29 and 30 show that where teacher counsellors do exist, and generally they do not they are accorded a high status in the school hierarchy, being mainly Deputy Headteachers and sometimes Headteachers.

6.5.3. Using the Teacher Counsellor

For those respondents who claimed to have a teacher counsellor, the final question asked them if they had ever had discussions with

that person. Table 31 shows that just over half of the 20 respondents concerned stated that they had. So, it would appear that where a teacher counsellor is provided by the school, he or she is used fairly extensively, Perhaps, though, the significant finding is that just under half of the respondents have not made use of their teacher counsellor.

Table 31 Using the Teacher Counsellor

	Absolute Frequency	Adjusted Frequency %
No	8	40.0
Yes	12	60.0
TOTAL	20	100.0

6.5.4 Intended Use of a Teacher Counsellor

The 102 respondents who claimed to have no one in a formal capacity with whom they could discuss their professional problems were asked, in item 5c, whether they would make use of such a counsellor if their schools had one. In response to this question, several respondents remarked, quite understandably, that such use would depend upon the personality of the counsellor. Table 32 shows the results.

Table 32 Intended Use of a Teacher-Counsellor

	Absolute Frequency	Adjusted Frequency %
No	40	44.0
Yes	51	56.0
No Response	11	-
TOTAL	102	100.0

It would appear that exactly half of the respondents would make use of a teacher counsellor if such a person were provided. It is interesting to note that this percentage is more or less the same as that concerning the number of teachers who do make use of an existing teacher counsellor (See Table 31). However, and as with the actual use of a teacher counsellor, there is still a high percentage of respondents who would not make use of a teacher counsellor.

6.5.5 Discussing professional problems

Item 6a of Section Two of the questionnaire asked respondents if they discussed their school problems. Table 33 shows the results. The question was intended to give some measure of 'openness' of teachers. As Table 33 shows, an overwhelming majority of the sample, 116 respondents or 95% of the sample, stated that they do discuss their school problems with some one.

Table 33 Discussing School Problems

	Absolute frequency	Adjusted frequency %
No	6	4.9
Yes	116	95.1
TOTAL	122	100.0

The respondents answering 'Yes' were then asked to state with whom they most frequently discussed their problems. This item afforded an opportunity to include an internal check on the previous question regarding the existence of a teacher-counsellor. There was a general consistency in response. The item was also designed to reveal with whom teachers discussed their problems if not with a teacher counsellor, as it was anticipated, quite correctly it is now shown, that not many schools would have teacher counsellors. The table reveals that three-quarters of the respondents discuss their problems with 'A Trusted Colleague'. It is interesting to conjecture whether the respondents placed the same interpretation on the word 'trusted' as did the researchers, that is, someone who would not divulge problems to a third person. The remaining named categories in Table 34 may suggest that those respondents concerned prefer not to have their problems known about by anyone in their schools choosing instead to discuss them with 'outsiders', either to the school in particular, or education in general. It

is also worthwhile noting here that none of the 116 respondents concerned with this question chose a category of response labelled 'An LEA adviser/official'.

Table 34 With Whom Discuss Problems

	Absolute Frequency	Adjusted Frequency %
Someone in school in an official capacity for such things	21	18.3
A trusted colleague	86	74.8
Someone in education but outside school	3	2.6
Someone not working in education	5	4.3
An LEA adviser/official	-	-
No answer	1	-
TOTAL	116	100.0

7. DISCUSSION OF THE RESULTS

7.1. The Prevalence of Teacher Stress

Any discussion of the present results regarding the extent and degree of teacher stress should be prefaced by some cautionary comments. Firstly, how reliable and valid are these results considering the sample size and the low rate of response to the questionnaire? Although the size of the sample was comparable to that used in other researches (Kyriacou and Sutcliffe, 1977b; Pratt, 1978) it could be that the respondents were not typical. This could mean that the results either exaggerate or underestimate the prevalence of stress - presumably the latter, if one assumes that those teachers experiencing stress would be reluctant to admit so.

Secondly, how acceptable are the results, based, as they are, on a scale of reliability .62? Is it right and proper to make judgements about the state of the mind and body of the individuals according to their scored responses to certain questions? Although reasons have been given for the selection of the 'cut-off' points on the stress scale, it could be argued that they still appear somewhat arbitrary. The statement that a score of 8+ suggests stress while that of 7 does not, could be criticised as oversimplifying a complex human phenomenon.

Thirdly, were the questions asked a sufficiently valid reflection of stress? Some reservations have already been noted about the absence in the stress scale of any item(s) of a more direct 'stress-like'

nature. However, here, at least, support can be gained from previous researches which have used the concepts embodied in the questions as response correlates of stress, eg, Kyriacou and Sutcliffe, 1979.

Fourthly, how reliable was the information in the answers to the 'stress' questions, supplied by the respondents? This applies not only to those questions requiring an 'objective' answer, ie, number of days absent, but also to those asking for a 'subjective' assessment, ie, the likelihood of leaving teaching. This problem accompanies all self-report investigations.

Finally, it must be stressed that the following results were obtained from a single LEA, located in a heavily urbanised area. Doubts may therefore be cast upon the generalisibility of its findings to other less urban, more suburban or rural areas.

It will be remembered that 12 teachers were said to be experiencing 'significant' stress and that they represented just over 10% of the sample. This finding does not appear to be in accord with either those of Kyriacou and Sutcliffe (1977b; 1978b; 1979) for secondary school teachers or Pratt (1978) for primary school teachers. Their findings for teachers experiencing stress were between 20% - 30% of their samples. However, their samples contained teachers of all years of experience whilst the present finding applies only to teachers of at least five years experience. It may be conjectured as to what difference would have been made to the result that 10% of the sample were experiencing stress, if teachers of under five years experience had been included - a teacher group often thought to encounter more problems, and thus more stress, than their more

experienced colleagues. However, as it is, the result must cause some concern, not just for the individuals concerned but for the possibility that 10% of the stock of experienced teachers are under stress.

The second finding was a refinement of the first. It stated that 5 teachers or just over 4% of the sample could be said to be experiencing extreme stress. The raw figure of 5 coincides with one result of Pratt's investigation (1978). He claimed that of his sample of 124 primary school teachers a 'handful' were seriously in need of professional help of some kind. Expressed, as a percentage, 4.4% to be precise, the present finding is remarkable similar to one of Kyriacou and Sutcliffe's (1978b), for they claimed that 4.3% of their sample found being a teacher 'extremely stressful'. However both Pratt's (1978) and Kyriacou and Sutcliffe's (1978b) sample, as has been previously explained, consisted of teachers of all years of experience. So it may be that the present result slightly exaggerates the problem, but a problem it most certainly remains.

Even if it was argued that the stress scale, upon which the above two results were constructed had more to do with job dissatisfaction than stress (and this would require ignoring the likelihood of job dissatisfaction being correlated to stress), the general results obtained for the whole sample are still disturbing. An examination of Table 10, The Distribution of Teacher Stress Scores, shows that

just under 20% of the sample obtained stress scale scores of five, six, or seven. This group of teachers could be described in terms of 'moderate' stress and be seen as moving towards the 'very' stressful condition.

Other results support this concern, Table 2 showed that just under one third of the sample had been absent between four and over twelve days; Table 3 that a smilar number had been absent between two and four occasions; Table 4 that about one fifth admitted to having 'gone sick'; Table 5 that a quarter of the sample were considering leaving teaching; Table 6 that over one third would not choose teaching as a career again; Table 7 that over a half of the respondents found teaching very or extremely physically fatiguing and finally there was Table 8's quite remarkable result that about four fifths of the sample found teaching either very or extremely emotionally fatiguing.

What makes these results even more striking is that they apply to experienced teachers. It would appear that, for some teachers, teaching does not get easier with experience. The results of this investigation reveal a picture of disillusionment and dissatisfaction as well as of stress.

7.2. STRESS, THE TEACHER AND THE SCHOOL

A number of writers have suggested that the experiencing of stress may depend upon certain biographical characteristics eg. Cox 1978; Kyriacou and Sutcliffe (1977a), Selye (1956) wrote of 'conditioning' factors both endogenous (age, sex, experience, etc) and exogenous (drugs, diet, etc). In this context a number of investigations were made into the possible relationships between several aspects of the teachers, their schools and stress.

7.2.1. Stress and the Teacher

The results indicated that there was very little association between teacher stress and sex, age, years of experience in teaching, professional qualifications, and whether problems were discussed. These results were generally in keeping with those of Kyriacou and Sutcliffe (1977b; 1978b; 1979) and like them it may be concluded that, perhaps further investigations should focus on the relationships between stress and various personality characteristics. Although several studies have found some differences which related to sex (Gabriels, 1957; Cortis, 1973), age (Payne, 1974; Buxton, 1977) and experienc

Buxton, 1977; Comber and Whitfield, 1979b), it may be that these biographical characteristics are not the significant influential ones in determining whether a teacher experiences stress or not.

However, one biographical characteristic was found to be significantly associated with teacher stress even though it was not in the direction predicted - position held in school. It had been

hypothesised that Departmental and Pastoral Heads would be under more stress because of their additional responsibilities (Dunham, 1978). In fact, it was the Assistant teacher group which had the highest mean stress score of 4.306. The results showed that Assistant Teachers scored higher than Departmental/Faculty Heads (3.148) who in turn, scored higher than the House Year(s) Head (2.217). The differences between the groups were significant at the $P < .05$ level. Obviously, any interpretation of these results must be guarded because no allowances were made for any interaction effects between the variable position held in school and for example, sex or age.

Why should Assistant Teachers obtain higher stress scores than the other two groups? Is it because they are not as competent as teachers, as those in the other two categories? (Also, does this mean that it is the efficient and effective teachers who get promoted?) Was their mean stress score a reflection of their dissatisfaction at still being only Assistant Teachers, after at least five years experience? (And is this a growing problem for the future with falling rolls and declining promotion opportunities?) Whatever the explanation this finding has something in common with previous results, Kyriacou and Sutcliffe (1978b) found that half of their 'sources of stress' items were rated greater by 'teachers' compared to 'Heads of Department'. They later found (1979) some evidence to suggest that 'female teachers' reported greater stress than their colleagues. Finally Comber and Whitfield (1979b) claimed that primary and secondary school 'Heads of Department' reported

fewer discipline problems with a lower frequency than 'Teachers' or 'higher' categories.

However, in view of the fact that some previous researches have not found any association between stress and position in school, it may be advisable to treat this result with some caution.

7.2.2. Stress and the School

The results in this area of the research were mixed. Some of the relationships examined did not prove to be significant whilst others did.

7.2.2.1. Size, SPA, Split Site, Uncooperative Pupils, Head Teacher and Stress

School size, Social Priority Allowance, split site, uncooperative pupils and the Headteacher's management style were found to be unrelated to teacher-stress. The result concerning school-size appears to go against not only common assumption but also the assertion and findings of several writers (Watts, 1974; Dunham, 1976). In its support, may be quoted the evidence of Comber and Whitfield (1979b) that stress due to indiscipline was not associated with large schools. What makes this present result slightly confusing, is another result, that 'Large Schools' were overall ranked third as a cause of 'concern and worry'. This apparent confusion may be explained by suggesting that those teachers, who ranked 'Large schools' as a cause of 'concern and worry' were not the same teachers who scored highly on the stress scale. The paradox serves as a reminder of the complex nature of stressors and stress.

A similar paradox could be argued to exist between the lack of relationship between SPA schools and teacher stress and the finding that 'Physical conditions, facilities, accommodation, etc' was the fourth overall cause of 'concern and worry'. It seems reasonable to assume that the latter would be a feature of SPA schools. On its own, however, the result is not sufficient to suggest removing the 'stress' allowances from SPA schools!

Dunham's (1976) contention that split site schools were associated with stress is not supported here, even though it received moderate 'support' (ranked eighth) as a cause of concern and worry. The lack of association between uncooperative pupils and teacher stress is also against some of the findings of Gabriels' (1957), Pratt (1978), and Kyriacou and Sutcliffe (1978b). Finally, there was no significant relationship found to exist between teacher stress and the Headteacher's management style even though 'Headteacher's style of decision making' received some support as a cause of concern and worry (ranked ninth), as did the suggestion of 'Personnel Management for Heads and Deputies' (ranked ninth in the Inservice and Supplementary Assistance' section). Thus, some of the suggestions of Watts (1974), Caspari (1976) and Kyriacou and Sutcliffe (1978b) are not supported here.

There can be little doubt that these results and their attendant paradoxes illustrate how complicated and involved is the teacher stress syndrome. However, they should not be taken as conclusive. Their disagreement with past work and the absence of any real investigation into the relationships they sought to establish should prove good enough reasons to warrant further research.

7.2.2.2 Discipline, Support and Stress

One of the three significant results found in relation to the school concerned discipline. The result, significant at $P < .05$, was that teachers in schools of 'lax' discipline appeared to be more stressed than their colleagues in schools of 'tolerant' or 'firm' discipline. This finding gains support from some of the work of a number of writers, eg, Gabriels (1957), Caspari (1976), Dunham (1977b), Kyriacou and Sutcliffe (1978b) and Comber and Whitfield (1979a). The latter's result comes closest to the present one, for they concluded that indiscipline was a serious problem in some schools, imposing considerable stress upon the teachers. This result is not only significant, statistically, but also publicly for it is one of the few findings to link stress to indiscipline. All too often investigations have been left with the impression that teachers have not revealed all their worries about indiscipline. The result however, still raises the question of whether it is the 'tip of the iceberg' - is it still an understatement of the problem?

Since then 'lax' discipline is associated with stress, what can be done about it? The school, for its part, can formulate and implement, consistently a clear and agreed policy on discipline. Courses concerned with discipline, teaching and management techniques could be organised and attended so that the general performance of the school is improved, for indiscipline can rarely be seen on its own. Its origins may lie in the many aspects of school, eg curriculum, communication, movement. But the school can only do so much.

Comber and Whitfield (1979a) have written clearly of the comprehensive approach which is needed, noting the roles to be played by local authorities, parents, media, voluntary agencies, churches and the like. Indiscipline in schools may have grown recently but some of its roots lie outside in the wider society.

The result associating teacher stress with the 'unsupportiveness' of the Headteachers ($P < .01$) towards his staff is in general accord with the writings of Hoyle (1969), Giles (1977), Kyriacou and Sutcliffe (1978b), and Comber and Whitfield (1979b). Giles (1977) emphasised a concern for staff morale as a valuable aspect of the role of the Head while Kyriacou and Sutcliffe (1978b), cited the 'attitudes and behaviour of the Headmaster' as being significantly related to self reported teacher stress. Strangely enough, though, another paradox raises itself here. For although the suggestion of 'Personnel management for Heads and Deputies' received some support (ranked ninth), 'relations with the Headteacher' was almost null and void as a cause of worry (ranked twenty one) What exactly it is that the Head is unsupportive of is open to conjecture. Perhaps it is in matters of discipline or parents. Perhaps it is connected with questions of decision making or curriculum.

The final significant result was the association between teacher stress and the unsupportiveness of the staff towards one another. This result was significant at $P < .01$. Rudd and Wiseman (1962), Caspari (1976), Dunham (1976) Giles (1977), Pratt (1978) and Kyriacou and Sutcliffe (1978b) have all noted the importance of

staff relations as sources of stress or dissatisfaction. Kyriacou and Sutcliffe (1978b) found a significant correlation between the 'attitudes and behaviour of some other teachers' and self reported stress. Again, though, a paradox, for neither 'Relations with other teachers' nor 'Staff relationships' figured highly in the rankings for causes of concern and worry and assistance respectively. As before, it can be conjectured as to what it is that some teachers find disconcerting about the unsupportiveness of their colleagues. However, there can be little questioning the conclusion that support from both Head and Staff is a vital element in the life of a school for some teachers. It could be that their effectiveness as teachers let alone their self esteem as people are at risk.

7.2.3. Comments

The questions concerning practical actions will be examined in the discussion of the ways in which the teachers felt that their roles could be assisted. So, at this point, mention will be made of just two possible ways in which the teachers in particular and the schools in general could be helped. Both suggestions might be seen as contributing to the 'organisational health' (Miles, 1965) of schools, for both could further cohesiveness, morale and communication.

7.2.3.1 A School Climate

The previous section underlined the importance of support, from both the Head and the staff. It would seem expedient, therefore, for schools to try and develop better group supportiveness and to create a kind of 'therapeutic milieu' (Janis, 1971), a staffroom climate which would allow unhibited discussion. Teachers must be encouraged to communicate their problems and apprehensions without being made to feel incompetent and inadequate. A climate such as this would be difficult to wholly achieve. However, such methods as group therapy, team teaching courses, informal meetings, personnel a training for senior staff, along with a general attitude which does not censor, may help. One of the underlying themes, is obviously, cooperation. Unfortunately, cooperative approaches are not always characteristic of schools. Tradition makes the teacher fairly autonomous in his classroom, a classroom where he can perform his role 'invisibly'. This classroom isolation has almost actively encouraged non-supportive relations among teachers. For those teachers experiencing stress, the feeling of loneliness especially in a large school, can compound the stress. Hargreaves, (1978) has described the problem in a most striking manner - 'Teachers bear their stress in painful isolation. It attacks the heart of the teacher, both physically and metaphysically'. The support of colleagues can be a very effective coping strategy.

7.2.3.2. A Teacher Counsellor

The second strategy concerns the appointment in some, if not all, schools of a 'teacher counsellor' or a 'professional tutor'. Whatever title is decided upon, it would be the responsibility of this person to be involved with pastoral care for all the staff. He or she should be looked upon as another resource within the school for helping to deal with any staff problems that arise. The task would be demanding, requiring the skills of a counsellor, the expertise of a 'good' teacher, and the knowledge of the assistance that external agencies could offer. This all embracing role would then be in an appropriate position to be involved, if requested, with problems of a professional and personal nature. It is no longer sufficient to provide assistance just for probationary teachers. All staff are likely to require some assistance at some time. The present research found that about 84% of the respondents claimed that their schools had no one in a formal capacity with whom they could discuss their professional problems. About half of those respondents without a 'teacher counsellor' said that they would make use of one if introduced into their schools.

The provision of a teacher counsellor would help to create and complement a cooperative school climate. Both would support, and could have supported, teachers in confronting the changes in organisation, curriculum, and pedagogy, which schools are undergoing or will

undergo. In the past much attention has been given to the negative effects of teaching upon the pupils and little to the negative effects upon teachers. It would be in the interests of education to provide the optimum physical, social and psychological environment for teachers.

7.3 The Causes of Teacher-Stress

Before proceeding to a discussion of the findings in this area of the research, it should be noted that the items in the table in Section Three of the questionnaire, 'Working Conditions of Concern to You', were intended to be seen as potential stress-stimuli. It was up to the respondents to appraise the potential stress-stimuli as actual stimuli. Apart from the reliability of the responses received, two other reservations were harboured. Firstly, how well would the respondents understand that the phrase 'concern and worry' referred to those aspects of the role of the teachers which they, as individuals, found distressing? Would they appreciate that the phrase 'concern and worry' was a euphemism for stress? Secondly, to what degree would the responses be a reflection of a fairly objective professional judgement as opposed to a subjective reaction of an individual teacher? In other words would a respondent rank, from 1 to 4, 'Large classes' as an item of concern and worry because he believed them to be educationally disadvantageous and not because he or she personally experienced problems as a result of them?

However, four major items of concern and worry were identified and were overall ranked as follows:-

1. Insufficient time, eg teaching, marking, clerical duties.
2. Too much expected of teachers, eg social work, pastoral care on top of academic work.
3. Large schools.
4. Physical conditions, facilities, accommodation, etc.

It was previously noted, that the first two overall ranked items and the fifth 'Covering lessons for other teachers', may have a common theme, ie, too much to do in too little time. Certainly, this finding has much in common with previous research results. Rudd and Wiseman's (1962) fourth ranked source of teacher-dissatisfaction was 'Teaching Load' (including extra classroom duties)whilst their eighth ranked source was 'More time needed'. In one of their investigations Kyriacou and Sutcliffe (1978b) identified a factor labelled 'time pressures' which included such items as 'too much work to do' and 'lack of time for marking' In a later research, Kyriacou and Sutcliffe (1979) found that 'Too much work to do' was both significantly and negatively correlated with job satisfaction and both significantly and positively correlated with the frequency of absences. At the primary school level, Pratt (1978) referred to a source of 'perceived stress' which was termed 'extra jobs'.

It may well be that some teachers are experiencing 'role overload'. Warr and Wall (1975) have cited this as a stressor. Perhaps some teachers feel that society in general expects too much of them and from them. There can be little doubt that the last fifteen or so years have seen a broadening of educational objectives, for one reason or another. In this context Hargreaves (1978) has commented upon the requirement of teachers that they 'stand in for parents, policemen, priests and social workers.' Other writers have also noted the inflation of the teacher's role. Hoyle (1969) has written of the new roles of social work and counselling while Watts (1974) emphasised the duality of the teacher's role in the

academic and pastoral spheres. In 1969 Musgrove and Taylor (1969) asserted that teachers were resisting and would continue to resist the pressures to extend their role. Perhaps. the ranking of the 'Too much expected of teachers, etc' item confirms that the struggle continues and that the issue remains a sensitive one for some teachers.

If, then, some teachers feel aggrieved at the demands and breadth of their role is it because they see certain aspects of thier work, clerical, pastoral, as deflecting them from their more traditional role of teaching? Kyriacou and Sutcliffe (1979) suggested that, perhaps, teachers were dissatisified with the conditions of their work rather than with the experience of teaching. Certainly, none of the four items ranked here deals directly with teaching. So, are teachers more concerned and worried about the teaching environment physical and non-physical, and its pressures than they are about actual teaching?

What could be done to alleviate the concern and worry caused by these factors? Two suggestions for action were located in the table in Section Five of the questionnaire, ie 'Unqualified teachers' 'aides'/ancillary staff' and 'Defining and assessing the work of a teacher'. The supply of ancillary workers could relieve the teachers of certain clerical, administrative and preparatory work. However, such supply may well not just depend upon LEA policy but upon economic climate as well. The second suggestion focuses upon a

clearer job-definition. This may then reduce the time pressures and the possibility of role overload and allow some teachers to concentrate upon teaching whilst others concentrated upon, for example, pastoral work. This suggestion assumes that a concensus could be reached about the role of a teacher - a notoriously diffusely defined occupation, as the teacher industrial action of 1979 proved.

The third overall ranked item was 'Large schools'. Unfortunately, a ranking of the item 'Large schools' does not explain what it is about them that is disturbing. Is it their 'largeness'; their disunity and variety of views amongst staff and the consequent lack of consensus; their potential for depersonalising, alienating and neglecting the individual teacher and pupil, or is it their problems of communication and administration? Certainly, large comprehensive schools have their opponents even if their effects are not well documented. In terms of stress Dunham (1976) referred to large schools as common stress situations but neither this research nor that of Comber and Whitfield (1979b) found a relationship between school size and stress itself, for the former and school size and stress produced by pupil ill discipline, for the latter.

If, then, for whatever reason, some teachers find large schools worrying, what can be done to improve the situation? There really seem to be only two practical suggestions. Firstly, for those teachers to move schools, if that is possible, and secondly, for the senior management of large schools to implement strategies which will

reduce the ill-effects of size. The nature of communication systems, participation structures, support-systems, approving and caring climates, and so on, could then be examined. Finally, a point worthy of note for the senior management of schools, is that the largeness of a school sometimes depends upon a person's perception - ie. what is a 'large' school to one teacher may not be to another.

The fourth overall ranked item was 'Physical conditions, facilities accommodation, etc'. This finding has some similarity with previous research. Rudd and Wiseman (1962) had 'Inadequacies of school buildings and equipment' as their third ranked source of teacher dissatisfaction; Dunham (1976) quoted old and inadequate buildings as common stress situations while Kyriacou and Sutcliffe (1978b) in their source of stress factor 'Poor working conditions', included such items as 'shortage of equipment' and 'poor facilities'. Obviously, then, some teachers find their actual physical environment a cause of concern and worry.

It had been thought that, perhaps this particular finding was a reflection of the sample containing Social Priority Allowance Schools and teachers. For example, Payne (1974) had found that Educational Priority Allowance school teachers considered themselves 'worse off' in comparison to other teachers in respect of physical conditions, teaching facilities and equipment. In fact, the present sample contained 35 SPA teachers. As 32 respondents had ranked from 1 - 4 the item 'Physical conditions, etc', it may be that this result is indeed a reflection of the feelings of the SPA teachers in particular. Since no analysis of ranked items by SPA school was undertaken, this interpretation must remain a tentative one.

There appears to be very little that can be suggested in the way of remedial action which would not require capital outlay, large, modest, or small. Perhaps the teachers concerned could attempt to change schools.

Most of the items in Section Three of the questionnaire recieved some sort of support. This accords with one of the results of Kyriacou and Sutcliffe (1978b). Thus, support is given to a fundamental aspect of the stress syndrome, which is, that what causes stress will vary from individual to individual. In the present context, it can be stated that within a staff of teachers a variety of 'stressors' or stress stimuli can be expected.

7.4 Inservice and Supplementary Assistance for Teachers

Section Five of the questionnaire, titled as above, was included so that the participating LEA might have some basis on which to build action to help teachers in their work. In the context of stress, Section Five could be seen as a sample of possible 'coping strategies', designed to help the teachers overcome their stressful situations. However, this would depend upon the degree to which the teachers' choice of items in Section Three of the questionnaire dealing with the causes of concern and worry, accorded with their choice of items in Section Five. For example, could it be expected that a teacher choosing 'maintaining discipline with classes and individuals' from Section Three would later select 'Class Management 1, eg discipline, behaviour, and relationships within the classroom' from Section Five? It was conjectured in the earlier relevant 'Results' section to what extent the choices in Section Five revealed areas of concern and worry, ie, was Section Five an indirect form of Section Three?

The first four overall ranked items were as follows:

1. Training for further responsibilities, eg, Head of Department, Pastoral Head, etc.

2. Intellectual stimulation and refreshment (eg full time masters course).

3.= Class Management 2 eg, presentation of material to varied age ranges and ability groups.

.= Motivating pupils.

It seems likely that the first two overall ranked items have in common a 'careerist' dimension, ie, further training and qualifications could greatly assist a teacher's chances of promotion. Perhaps the selection of these two items was stimulated by the increasing difficulty in finding opportunities for advancement let alone in realising them. However, it could also be that some teachers saw these items as representing ways in which they could improve themselves professionally by acquiring new skills and by developing their knowledge and understanding of education in general and schools in particular. Finally it should be remembered that preparation for the demands of new roles may reduce the possibility of stress arising from them (Dunham, 1976). Sometimes new Heads of Department are as much at 'risk' as are probationers.

Although the point has been made that it is difficult to say to what extent the choice of items in Section Five reflects areas of concern and worry, the temptation remains! With regard to the 'Intellectual stimulation, etc' item, two comments can be made. Firstly, does it represent a desire to temporarily withdraw from a stressful situation? Both Dunham (1976) and Simpson (1976) have written of the forms of 'withdrawal' which teachers can and do make use of. Simpson (1976) makes the additional point that withdrawal from the situation may allow the subject(s) time in which to develop the skills and abilities necessary to cope with any stress-stimuli. Secondly, does the choice of this item say anything about the possible stresses of dealing with young and immature minds (Caspari, 1976)? For instance, Hargreaves (1978) has commented about the lack

of intellectual challenge to be found in teaching while Kyriacou and Sutcliffe (1978b) found support for the item 'pupils' general low ability' as a source of stress. Certainly, the folklore of the staffroom often contains scathing remarks about the ability levels of pupils. So, perhaps, this item does contain some negative inferences.

The two items ranked equal third, 'Class Management 2, etc' and 'Motivating pupils', may also have some common themes. It has already been noted that they may contain a suggestion of inadequate or out-of-date skills and abilities. Thus, it may well be that these two items reflect a concern on the part of some teachers to improve their levels of competence and standard of pedagogy. These, it could be argued, would then make for a more effective learning environment and for improved pupil-performance.

However, looked at another way it could also be argued that better teacher skills may improve the climate within the classroom and the school and so reduce some of the possible causes of teacher stress. Caspari (1976) was quite sure that the better presentation of lessons would reduce pupil indiscipline. Several writers have previously noted the importance as stress stimuli of non-cooperative children and poor pupil attitudes to work (Pratt. 1978; Kyriacou and Sutcliffe, 1978b). Perhaps, the development of comprehensive schools has confronted teachers with wider variations of ability and attitudes than they were previously used to (Dunahm, 1976; Laslett, 1977)? Perhaps, also in the face of new circumstances some teachers feel inadequate? After all both Rudd and Wiseman (1962) and Pratt (1978)

had found that 'feelings of inadequacy as a teacher' for the former and 'A general inability to cope with teaching problems', for the latter, had figured quite prominently as either sources of 'dissatisfaction' or 'perceived stress'. In this context, the provision, somehow of new skills would be a genuine coping strategy.

Finally it needs to be emphasised that a large number of items in Section Five of the Questionnaire received a fair degree of support from the teachers. This was to be expected. Different teachers will have different problems and so require different forms of support.

If assistance is to be given to the teachers then the results here do, at least, offer some guidance in providing that assistance. And, if at all possible, that assistance should be given at the school. This should ensure it being relevant and worthwhile and focused upon the needs of the school and its staff.

7.5 In Retrospect

Finally some brief comments about the research design. Firstly, a larger sample would have been preferred. Perhaps the inclusion of a stamped addressed envelope would have helped in this, safeguarding as it would have any controversial and private comments. However, the delicate nature of the research would still have remained a potential barrier to response. In the final analysis it may be concluded that the disappointing response rate reflected, to some degree, not only a reluctance on the part of the teachers to disclose aspects of their 'secret' worlds but also a negative judgement on the climates of supportiveness/unsupportiveness which characterised their schools. Secondly, it would have been preferable if more items in the stress scale had been more directly 'stressful' and subjective in nature. The inclusion of the physical and emotional fatigue questions of Section Four of the questionnaire, into the scale would have given it a greater validity. However, as a first attempt at a teacher-stress scale it was reasonably successful.

Future research into teacher stress should strive for larger samples and focus on all sectors of education - infant, junior, secondary and tertiary - for they may all have 'stressors' and hence remedial action, peculiar to themselves. Given the relative 'novelty' of this field of research, work will still need to be undertaken to investigate the relationships between teacher stress and various biographical and school variables. However, it may be that the

most profitable lines of enquiry will involve personality variables (Warr and Wall, 1975; Spielberger, 1979). Whatever the outcomes of those areas, attention should also be given to establishing the kinds of 'coping strategies' which teachers would find beneficial.

Finally there is a need to develop valid and reliable measures of stress, perhaps along the lines of the stress scale used in this research. It would also be appropriate to include physiological measures of stress for such is the idiosyncratic nature of stress that some subjects may not 'register' on certain measures but will do so on others. However, the collection of physiological measures could involve certain practical difficulties, not the least of which might be the intrusion into classrooms and staffrooms.

8. STRESS AND TEACHERS OF UNDER FIVE YEARS EXPERIENCE

8.1 Introduction

Following the analysis of the data regarding the teachers of five or more years of experience, it was decided to analyse the data concerning the teachers of under five years experience. Exactly the same analyses were undertaken so as to establish the prevalence of stress, the relationships between stress and biographical and school variables, and the overall rankings of the causes of professional concern and worry. The major purpose of this subsidiary analysis was to facilitate comparisons of results between the main sample and this particular sub-sample.

8.2 The Stress Scale

The sub-sample contained 40 subjects but generally, data was only available for 37 respondents.

The Cronbach alpha reliability coefficient for the five-item stress scale, as applied here, was .53 (c f, 0.62 of the main sample). This modest reliability must be borne in mind when considering the validity of the later findings.

8.3 The Prevalence of Stress

A 'frequency' analysis of the sub-sample (N=37) was undertaken to calculate by the same criteria as had been used for the main sample of more experienced teachers how many could be said to be experiencing stress and severe stress. Table 35 gives the relevant statistics.

Table 35 The Distribution of Stress Scores for Teachers of Under Five Years Experience

Stress Scores	Number of Cases	Percentage of Cases
0	3	8.1
1	3	8.1
2	1	2.7
3	12	32.4
4	5	13.5
5	4	10.8
6	6	16.2
7	1	2.7
8	-	-
9	1	2.7
10	1	2.7
TOTAL	37	100.0%

Mean: 3.865	Standard Error .376
Standard Deviation: 2.287	Variance: 5.231
Minimum Score: 0	Maximum Score: 13

The stress score of 8 had been previously designated as the 'cut off' point, ie, the score at or above which a person would be deemed to be suffering significant stress. Table 35 shows that overall this applies to only two teachers (or 5.4% of the sample). For severe stress the cut-off point was a score of 10 and it will be seen that this applies to only one teacher (or 2.7% of the sample).

Firstly, how do these findings compare with those for the larger sample (N = 116)? There it had been decided that overall 12 teachers (or 10.5%) were experiencing stress and of these 5 (or 4.4%) were experiencing severe stress. It could be claimed that the results for the sub-sample are lower than could have been expected. However, the smallness of the sub-sample together with the confusion over the original distribution of the questionnaires, which would have affected the representativeness of the sub-sample, may help to explain the results.

Secondly, there are trends in the data which give support to the belief that less experienced teachers encounter greater degrees of stress than their more experienced colleagues. For example, their mean stress score is higher (3.865 as against 3.267) and approximately 75% of them scored between 3 and 7 on the stress scale whereas the equivalent for the more experienced teachers was approximately 38%.

Thirdly, how do these results compare with others for less experienced teachers? Kyriacou and Sutcliffe (1978b) concluded

that of teachers of '0 to 4 years' experience (N = 73) 19.2% and 4.1% respectively found teaching to be 'very stressful' or 'extremely stressful'. The present approximate equivalents would both be 2.7%.

Finally, how do the combined results for the main sample and sub-sample (N = 153) compare with those of other researchers? In a previous discussion it was noted that between 20% - 30% of samples had been described in terms of teacher stress. The combined result here is 15.9%. Kyriacou and Sutcliffe (1978b) had found 19.9% of their sample to be experiencing stress. Although there is some agreement between the results their differences may be due in some measure to the nature of their samples, ie, local as against national and the character of their assessments of stress, ie, stress scale as against a single item measure.

8.4 Stress, the Teacher and the School

Most of the variables embodied in Sections One and Two of the questionnaire were again separately analysed in relation to stress by a one way analysis of variance.

It was found that none of the results which had proved significant with the large sample were repeated for this sub-sample. In fact, only one relationship was concluded to be significant ($P < .01$) and that was between teacher stress and size of school. It will be remembered that no such significant relationship was found for the more experienced teachers sample.

Table 36: Stress and the Size of School, 2

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F
Between groups	67.9582	4	16.9895	4.5168
Within Groups	120.3662	32	3.7614	
TOTAL	188.3243	36		

However, the relationship between stress and size of school as revealed here does not lend itself to simple explanation, eg that stress increases as the size of the school increases. A reading of Table 37 will illustrate the point. It will be noted that the highest mean stress scores apply to teachers in schools of '701 - 900' and 'Over 1301' pupils. This applies to both samples.

Table 37: Stress and the Size of School - Mean Stress Scores

Size of School	Teachers of over five years experience	Teachers of under five experience
Up to 700	1.333	0.0000
701 - 900	3.667	5.545
901 - 1100	3.045	2.666
1101 - 1300	2.846	3.444
Over 1301	3.571	4.750
Average Mean	3.2672	3.864

What explanation can be offered for this finding? Possibly, the 'Over 1301' mean stress score gives some credence to the notion of large schools engendering problems of alienation and depersonalisation (Watts, 1974; Hinton, 1974) and harbouring potential stress stimuli (Kyriacou and Sutcliffe, 1978b). As for the 701 - 900' mean stress score perhaps the less experienced teachers in the main find this size of school to be a 'watershed' - the point at which they move from a knowledge and familiarity of their suroundings, both physical and personal, to a feeling of insecurity and strangeness. Perhaps, schools of this size find themselves to be neither large nor small and the resulting ambiguity discomforting.

However, it may be better to treat this particular finding with caution, as a result which needs to be replicated and refined before it can be accepted.

8.5 The Causes of Teacher Stress

Table 38 shows the number of respondents who ranked from 1 - 4 an item which they regarded as a cause of concern and worry. It also shows the overall rankings of each item. Almost half of the items in the table received some modest support, ie, upwards of 8 total rankings, so giving further weight to the concept of variability in stress stimuli.

An examination of the overall rankings revealed that 6 items received 'good' support from approximately one third of the sample. Table 39 shows these items and their rankings and compares them to the four overall ranked items found for the more experienced teachers sample.

8.5 The Causes of Teacher Stress

Table 38: Working Conditions of Concern to you. 2.

Possible Causes of Professional Concern and Worry to teachers

Item	*Number of times ranked*				*Total*	*Overall rank*
	1	*2*	*3*	*4*		
1. Feelings of professional inadequacy eg, lack of skills	3	-	-	-	3	16=
2. Relations with parents	-	1	1	-	2	20=
3. Status of self and/or subject in school	4	1	1	2	8	8=
4. Large schools	3	1	1	3	8	8=
5. Inadequate job definition	-	-	2	1	3	16=
6. Relations with other teachers	-	-	-	1	1	22=
7. Headteacher's style of decision making	3	3	2	-	8	8=
8. Insufficient time, eg, teaching, marking	3	4	5	1	13	2
9. Concern for pupil success or failure	7	2	1	1	11	6
10. Split site schools	3	-	1	1	5	12=
11. Involvement in unfamiliar curricular situations	1	-	2	1	4	14=
12. Physical conditions, facilities, accomodation, etc	1	3	3	5	12	3=
13. Lack of opportunity for inservice training.	-	1	-	2	3	16=
14. Distribution of classes, eg, too many 'low' ability forms	-	2	2	1	5	12=
15. Covering lessons for other teachers	1	3	8	5	17	1
16. Contradictory expectations of teachers	1	1	2	-	4	14=
17. Large classes	2	7	-	3	12	3=
18. Relations with head teacher	-	1	-	1	2	20=
19. Maintaining discipline with classes and individuals	3	2	3	4	12	3=
20. Dealing with groups of wide ability range	3	1	2	3	9	7

21. Too much expected of teachers, eg social work	-	3	2	1	6	11
22. Work in classroom insufficiently rewarded	-	2	-	1	3	16=
23. Inadequacies of promotion system	-	-	-	1	1	22=
NO ANSWER	2	2	2	2		
TOTAL	40	40	40	40		

Table 38: Working Conditions of Concern to You

Possible causes of professional concern and worry to teachers

Table 39: A Comparison of Possible Stress Stimuli

Teachers of over five years experience	Teachers of Under five years experience
1. Insufficient time, etc	1. Covering of lessons for other teachers
2. Too much expected of teachers, etc	2. Insufficient time, etc.
3. Large schools	3. Physical conditions, facilities etc.
	= Large classes
	= Maintaining discipline etc.
6. Physical conditions, facilities, etc	6. Concern for pupil success, etc.

The degree of agreement between the rankings presents itself quite markedly. This is increased by a fuller examination of Table 25 which shows that 'Covering lessons for other teachers' and 'Concern for pupil success, etc' were overall ranked 5th and 6th respectively.

Some of the comments made in Sections 7.3 and 7.4 of the 'Discussion' obviously apply here as well, although it would be possible to suggest further motives for some of the rankings. For example that 'large classes' presented more of a disciplinary challenge to less experienced teachers and that 'covering' for colleagues was likely to place them in unfamiliar situations in terms of pupils and subjects to be taught. Both 'large classes' and 'maintaining discipline' were found to be sources of stress by Kyriacou and Sutcliffe (1978b) and Taylor and Dale (1971) and Gough (1974) concluded that the latter item was regarded by

Headmasters as the major problem of their probationary teachers.

9. CONCLUSION

The main findings of the research are re-stated here.

Employing a specially constructed stress-scale it was concluded that overall 10% of the sample were experiencing stress and that 4% were experiencing severe stress.

The significant relationships established by the research were between teacher stress and 'position held in school', 'discipline', 'the supportiveness of the Headteacher' and the 'supportiveness of the teachers'.

The four main causes of teacher-stress were identified as 'Insufficient time', 'Too much expected of teachers', 'Large schools', and 'Physical conditions, facilities, etc'.

The four main types of assistance which teachers requested to help them in the performance of their roles were 'Training for further responsibilities', 'Intellectual stimulation and refreshment', 'Class management', and 'Motivating pupils'.

The practical and theoretical implications of these findings were discussed in the relevant sections and so will not be repeated here. Suffice it to say that the findings themselves, ie, those regarding relationships, stress stimuli, and assistance, are in some ways the suggestions for practical action. However, special reference must be made to the arguments put forward for improved school climates and teacher counsellors.

But some crucial questions remain which this study could not answer. For example, there is the cost in terms of efficiency and days lost. Cox (1978) states that 37 million days are lost each year through psychological disorders, nervous debility, headaches, etc, and that this is probably an understatement. It would seem judicious to try and reduce the teachers' contributions to this, apparently ever increasing, total.

Secondly, there is the cost to the individual teacher not only as a person but in his or her role performance. Do the demands of the teacher's role reduce the issue to one of survival? Should some teachers be urged to take early retirement or, if this is not possible, to seek alternative employment? Does there then develop a 'hidden pedagogy of survival' (Woods, 1979) in which education and genuine teaching play only small parts? Again, it would seem prudent to equip teachers both before and during their careers with the necessary skills to cope. This certainly seems to be one way of altering an individual's perception or appraisal of a situation as 'threatening' (Cox, 1978). Group cohesiveness and support and an atmosphere in which worries and anxieties can be openly communicated are also essential.

Finally, there is the 'cost' to the pupils. Quite simply, to what patterns of stressful behaviour are they subjected? What education do they receive from teachers who, in differing degrees, find teaching to be stressful?

APPENDICES

A. Questionnaire on Teacher's Working Conditions

B. Letter to Teachers sent with Questionnaire

APPENDIX A

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QUESTIONNAIRE ON TEACHERS' WORKING CONDITIONS

1. [ ]

2-4 [ ] [ ] [ ]

The name of your school is not required but if you do not mind giving your name in the strictest confidence please write it here:

Name: _____

Unless otherwise indicated, please answer by ticking as appropriate in the spaces provided.

Section 1 : Yourself

1. Sex

Male	
Female	

5. [ ]

2. Age

Under 25	
25 - 29	
30 - 39	
40 - 49	
Over 50	

6. [ ]

3. Years of Experience in teaching.

1 - 4	
5 - 9	
10 - 19	
20 - 29	
Over 30	

7. [ ]

4. Position held in school (if not exactly described here please tick the nearest equivalent).

Assistant Teacher	
Department/Faculty Head	
House/Year(s) Head	

8. [ ]

5. Professional Qualifications.

A Teacher-Training Course	
Degree and Teacher-Training	
Degree and no Teacher-Training	
Unqualified	

9. [ ]

please turn over

FOR OFFICE USE	
COLS	CODING

Section 2 : Your School

1. Size

Up to 700 pupils		10.	
701 - 900 pupils			
901 - 1100 pupils			
1101 - 1300 pupils			
Over 1301 pupils			

2. Is it a Social Priority Allowance School?

Yes		11.	
No			

3. Is your school on a split-site for academic activities?

Yes		12.	
No			

4. Describe the general character of your school by ticking the appropriate box (one answer in each case).

a. The discipline is

Firm		13.	
Tolerant			
Lax			

b. The pupils tend to be

Co-operative		14.	
Unco-operative			

c. The Headteacher's management style is

Democratic		15.	
Consultative			
Authoritarian			

d. The Headteacher is generally

Supportive of Staff		16.	
Unsupportive of Staff			

e. The teachers are generally

Supportive of one another		17.	
Unsupportive of one another			

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5. a. Does your school have some person(s) in a formal capacity with whom any teacher can discuss, in confidence, their professional problems?

Yes	
No	

18. ☐

b. i. If Yes in 5a
Please state position, title, and scale of post, if known.

Position	19-20	☐☐
Title	21.	☐
Scale	22.	☐

ii. Have you ever had discussions with this person(s)?

Yes	
No	

23. ☐

c. If No in 5a
If your school had such a 'counsellor' would you make use of him or her?

Yes	
No	

24. ☐

6. a. If you have a problem concerning some aspect of school do you tend to discuss it with someone?

Yes	
No	

25. ☐

b. If Yes
Tick the category of person with whom you most frequently discuss the problem.

Someone in school in an official capacity for such things	
A trusted colleague	
An LEA Adviser/Official	
Someone in education but outside the school	
Someone not working in education	

26-27 ☐☐

please turn over

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Section 3 : Working Conditions of Concern to You

Please select from the Table below the four most important items which, in relation to your experience, give you cause for concern. Please rank from '1' (Most Important) to '4' (Fourth Most Important).

Possible causes of professional concern and worry to teachers

1.	Feelings of professional inadequacy e.g. lack of skills, abilities in classroom or in administration.	
2.	Relations with parents.	
3.	Status of self and/or subject in school.	
4.	Large schools.	
5.	Inadequate job definition e.g. not knowing what is expected of you.	
6.	Relations with other teachers.	
7.	Headteacher's style of decision-making.	
8.	Insufficient time e.g. teaching, marking, clerical duties.	
9.	Concern for pupil success or failure.	
10.	Split-site schools.	
11.	Involvement in unfamiliar curriculum situations.	
12.	Physical conditions, facilities, accommodation,etc.	
13.	Lack of opportunity for inservice training.	
14.	Distribution of classes e.g. too many 'low' ability forms, fifth year, etc.	
15.	Covering lessons for other teachers.	
16.	Contradictory expectations of teacher e.g. from Head, colleagues, parents, pupils.	
17.	Large classes.	
18.	Relations with Headteacher.	
19.	Maintaining discipline with classes and individuals.	
20.	Dealing with groups of wide ability range.	
21.	Too much expected of teachers e.g. social work, pastoral care on top of academic work.	
22.	Work in classroom insufficiently rewarded.	

NOTE: If you feel that the above has omitted something, then please write it here and rank accordingly within 1 to 4.

	28-29	
	30-31	
	32-33	
	34-35	
	36	

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Section 4 : School Absence and Your Present Feelings about Teaching

1. a. Approximately how many days have you been off school through illness in the last 12 months?

Not at all	
1 - 3	
4 - 6	
7 - 12	
Over 12	

37. [ ]

b. How many separate occasions in the last 12 months have you been absent from school because of illness?

None at all	
One	
Two	
Three	
Four	
More than four	

38. [ ]

2. Have you ever 'gone sick' because you were 'tired of work', 'felt in need of a break', etc?

Yes	
No	

39. [ ]

3. Which of the following statements is most likely to be applicable to yourself:

a. It is not likely that I will leave teaching in the near future. [ ]

b. It is possible that I will leave teaching in the near future if I can find suitable employment. [ ]

c. It is very likely that I will leave teaching in the near future if I can find suitable employment. [ ]

40. [ ]

4. Would you choose teaching as a career again?

Yes	
No	

41. [ ]

5. Using the scale 1 (low) to 4 (high) how physically fatiguing do you find teaching? [ ]

42. [ ]

6. Using the same scale 1 (low) to 4 (high) estimate how emotionally and mentally fatiguing you find teaching. [ ]

43. [ ]

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Section 5 : In-Service and Supplementary Assistance

Please select from the Table below the 4 most important items in which further training, courses, discussion, provision etc., would be helpful to you in your role as a teacher. Please rank as before, from '1' the most important to '4' the fourth most important.

1.	Class Management 1 e.g. discipline, behaviour, and relationships within the classroom.	
2.	Class Management 2 e.g. presentation of material to varied age-ranges and ability groups.	
3.	Staff Relationships.	
4.	Training for further responsibilities e.g. Head of Department, Pastoral Head, etc.	
5.	Professional tutors, counselling, etc., to assist teachers with their problems.	
6.	Teacher-participation in school decision-making.	
7.	Personnel Management for Heads and Deputies.	
8.	Teacher-parent communication, contact, and understanding.	
9.	Defining and assessing the work of a teacher.	
10.	Television playback and analysis of my lessons.	
11.	Motivating pupils.	
12.	Skill Modelling i.e. watching other teachers cope.	
13.	Specific skills and techniques e.g. reading, immigrants, examination design, etc.	
14.	Crisis Case Studies on individual pupils.	
15.	Recent relevant educational research.	
16.	Unqualified teachers' 'aids'/ancilliary staff.	
17.	Intellectual stimulation and refreshment (e.g. full time masters course).	

NOTE: If you feel that the above Table has omitted something, then please write it here and rank between 1 and 4 accordingly.

	44-45	
	46-47	
	48-49	
	50-51	
	52	

THANK YOU FOR YOUR CO-OPERATION

Department of Educational Enquiry
University of Aston in Birmingham

July 1978

Appendix B

Letter to teachers sent with Questionnaire

3 July 1978

Dear Experienced Teacher

We have received permission from your Director of Education, Mr _____ to circulate the attached questionnaire to your for completion. The questionnaire is part of a project generally concerned with the working conditions of teachers. The results of this study whould help to suggest ways in which teachers' working conditions may be modified.

Your willingness to disclose, in confidence, your experience is crucial to the study and the questionnaire has been constructed so as to require a mimimum of your time, at most 15 minutes. Please complete the questionnaire by the end of your term, ie, July 21st, and seal it in the envelope provided. Place your envelope in the box file which we have left in the school secretary's office; this will be collected by us on July 21st or 24th.

We would welcome any comments that you may have concerning any aspect relevant to the study which has either not been mentioned or insufficiently dealt with by our questionnaire.

A second phase of our study will follow up (again in confidence) a very small proportion of those responding. We would therefore like to have the names of at least some of our teacher sample, but we leave the decision as to whether you disclose your name (or indeed answer the questionnaire) entirely in your hands. We would, however, wish to emphasise that our concern in executing this research, which we hope you will feel is relevant, is to improve the well-being of our profession.

Finally, we wish to emphasise that no individual teacher will be identified in any reports of the research which may be subsequently written. Thank you for your cooperation.

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