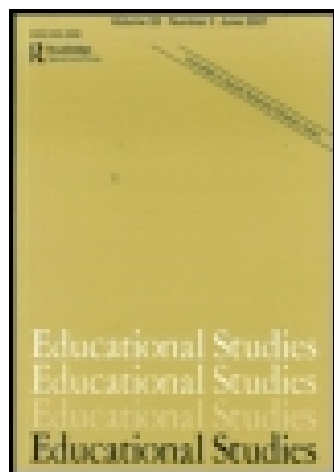


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A Model of Teacher Stress

CHRIS KYRIACOU & JOHN SUTCLIFFE

Dunham (1976) in a study which included reports from 658 schoolteachers concluded that more teachers are experiencing stress, and that severe stress is being experienced by more teachers. Other authors (e.g. Andrews, 1977) have also argued that there appears to be an increase in stress among teachers. As yet however, research into occupational stress among teachers ('teacher stress') is still in its infancy (see Kyriacou & Sutcliffe, 1977, for a review). Before research on teacher stress can be carried out meaningfully, a clear definition and model of teacher stress needs to be developed. The present paper is the result of an attempt to develop a definition and model of teacher stress that takes into account the various approaches that have been utilised regarding the study of occupational stress generally. Indeed, although the model presented here has been specifically developed with teachers in mind, the authors believe that it may be applicable to all occupations.

THE CONCEPT OF TEACHER STRESS

Although the term 'occupational stress' has been widely used (e.g. Cooper & Marshall, 1976; Ferguson, 1973), there appears to be little consensus as to how the term should be defined, nor as to the model of occupational stress that should be employed. The proliferation of similar terms such as 'work stress' (Warr & Wall, 1975), 'industrial stress' (Buzzard, 1973), 'organisational stress' (Miles, 1976), 'job stress' (Caplan, Cobb & French, 1975), 'job pressure' (Buck, 1972) and 'job strain' (Singer, 1975), only serve to add to the conceptual confusion regarding this area of investigation.

Nevertheless, two common usages of the term stress itself may be clearly distinguished (Cox, 1975; McGrath, 1970). The first defines stress in terms of the stimulus characteristics of the environment, and essentially conceptualises stress as pressure exerted by the environment on an individual. The second defines stress in terms of a state or response pattern displayed by an individual, and essentially conceptualises stress as something that happens within the individual.

The first usage, that of stress as pressure exerted by the environment, has been labelled the engineering model (Cox, 1975; Hinkle, 1974; Wild & Hanes, 1976), since engineers also use the term stress to refer to environmental forces acting upon a body. This model has been widely employed (e.g. French & Caplan, 1972; Kahn *et al.*, 1964; Kollar, 1961), and was utilised by Cooper & Marshall (1976) who defined occupational stress as negative environmental factors or stressors (e.g. work overload, role conflict/ambiguity, poor working conditions) associated with a particular job.

The second usage, that of stress as a state of the individual, has been labelled the physiological model (Cox, 1975), since the identification and quantification of the state of the individual as

stress was initially carried out with reference to the physiological response pattern of the individual (Selye, 1956). This model of stress has been even more widely employed (e.g. Appley & Trumbull, 1967; Arnold, 1967; Cofer & Appley, 1964; Dohrenweld, 1961; Levi, 1972; Pepitone, 1967; Scott & Howard, 1970; Sells, 1970; Selye, 1975). Unlike Arnold (1967) who defined stress as any condition of disturbed normal functioning, most of the authors who define stress as a state of the individual, qualify their definition with respect to what the state is the result of or response to. Some authors have argued that the state consists of nonspecific responses of the body to any demands made upon the organism (Levi, 1972; Selye, 1974). Indeed, Selye (1975) has argued that stress is present all the time, as life itself makes continual demands on the individual which have to be met. Other authors have argued that stress is the result of some appraisal mechanism (Appley & Trumbull, 1967), either the perception of threat from the environment (Scott & Howard, 1970) or the endangerment of well-being (Cofer & Appley, 1964), or the perception that there is an imbalance or discrepancy between the demands made upon the individual and the individual's ability to meet or cope with these demands (Gowler & Legge, 1975; Morris, 1975; Welford, 1973), where failure to meet or cope with these demands has important consequences for the individual (Burgoyne, 1975; McGrath, 1970; Sells, 1970). Definitions that conceptualise stress as the result of an imbalance or discrepancy between demands and ability have been labelled transactional models of stress (Cox, 1975), since they focus on the interaction between the individual and his environment to determine whether stress will occur. However, to the extent that transactional models still conceptualise stress as a response state, they may be regarded as qualified physiological models. Mechanic (1970) has employed a transactional model, but has departed from most other authors in emphasising that researchers should focus on the objective discrepancy between demands and ability rather than on the individual's perception of the discrepancy.

Warr & Wall (1975) have used the term stress to refer to a state of the individual, and have defined occupational (work) stress in terms of the individual's experience of tension, anxiety, fear, discomfort and associated psychological disorders, resulting from aspects of the work situation which depart from the optimum (e.g. too little or too much work). Warr & Wall seem to have employed a physiological model since they do not appear to incorporate the notion of discrepancy between demands and ability into their model.

Numerous authors however have expressed dissatisfaction with the use of the term stress. Some feel that the term has little explanatory value (Hinkle, 1974), and others feel that the term should simply be used to denote an area of investigation rather than as a scientific concept with hypothetico-deductive power (Lazarus, 1966; McGrath, 1970).

Warr & Wall (1975) have argued that the conceptualisation of stress as an affective reaction of the individual is most in line with common usage. Furthermore, the engineering model appears to be inappropriate to a model of stress where the perception and appraisal of the stimulus characteristics of the environment plays an important part. As such, in presenting a model of teacher stress here, it is the usage of stress as an affective reaction of the individual that will be employed.

Teacher stress may be defined 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 bloodstream) 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.

This definition is conceptualised with respect to the model of teacher stress shown in Fig. 1.

A MODEL OF TEACHER STRESS

In comparing and contrasting the models of stress that are in current usage (e.g. Cooper &

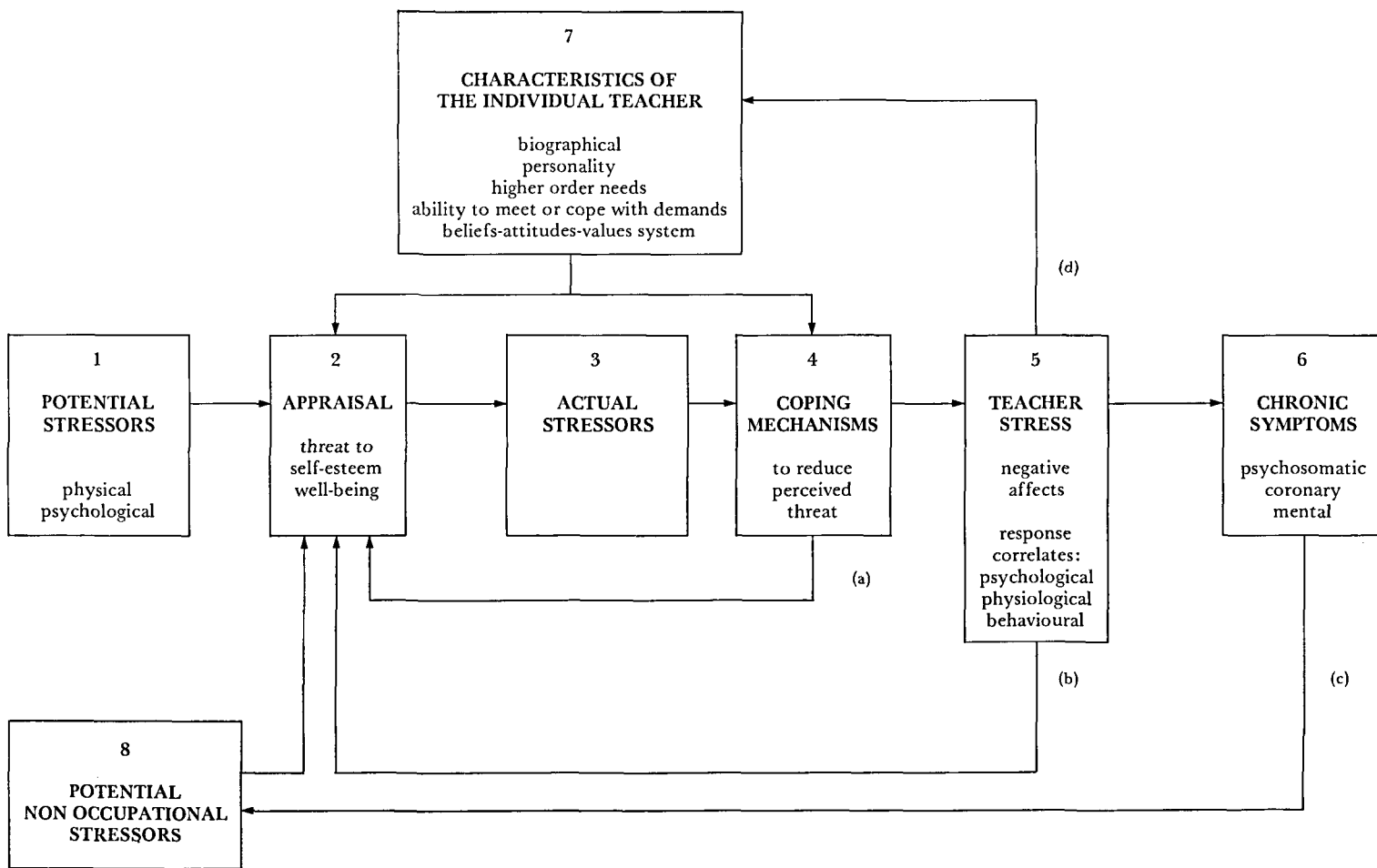


FIGURE 1. A model of teacher stress.

Marshall, 1976; Warr & Wall, 1975; Wild & Hanes, 1976), it is readily apparent that although terms may be used differently, the underlying models are very similar, and, *mutatis mutandis*, may be reducible to each other. The model of teacher stress presented here is an attempt to present a model that incorporates the current approaches to stress.

Rather than starting with the sources of stress (stressors) at work, the model distinguishes between potential occupational stressors (box 1, Fig. 1) and actual occupational stressors (box 3). Potential occupational stressors are objective aspects of a teacher's job (such as too much work or high noise levels) which may result in teacher stress (box 5) occurring. Potential occupational stressors will only result in teacher stress if they are first perceived by the teacher to constitute a threat to his self-esteem or well-being (box 2). Such an appraisal may occur in two ways. Firstly, the teacher may feel he is unable to meet or cope with the demands made upon him, and such failure has important consequences for him. Or secondly, the demands made upon the teacher conflict with his higher order needs (Beehr, Walsh & Taber, 1976).

The appraisal made by a teacher of the demands made upon him will depend on the interaction between the teacher's individual characteristics (box 7) and the teacher's perception of the demands made upon him. The individual characteristics that may be of primary importance include biographical details (e.g. sex, age, teaching experience), personality traits (e.g. anxiety-proneness, flexibility-rigidity), higher order needs (e.g. need for self-actualisation), ability to meet or cope with the demands, and the teacher's beliefs-attitudes-values system. It should be noted however that it is the teacher's perception of his own ability to meet or cope with the demands made upon him rather than his actual ability that will partly determine his appraisal. Research elsewhere (Lefcourt, 1976) has indicated that people differ in the degree to which they perceive themselves to have control over their environment. Lazarus (1966) has argued that such differences may partly explain individual differences in appraisal between people of similar objective ability to meet the demands made upon them. Indeed, it has been argued (Averill, 1973) that perceived lack of control is a necessary condition for stress to occur. The appraisal may also be affected by potential stressors (such as life crises or ill health) that are not specifically aspects of the job. Such stressors have been termed potential non-occupational stressors (box 8).

A distinction is also made between potential occupational stressors that are essentially psychological (e.g. demands for high-quality work, poor relationships with colleagues) and those which are essentially physical (e.g. dashing between classes, high noise levels), whilst recognising that some potential occupational stressors (e.g. marking numerous exam papers) may be a mixture of the two. However, it is argued here that potential physical stressors, as well as potential psychological stressors, may only lead to teacher stress when the individual teacher perceives a threat to his self-esteem or well-being (Lazarus, 1974; Mason, 1971). Potential occupational stressors that have been appraised as constituting a threat have been termed actual occupational stressors (box 3). Actual occupational stressors are conceptualised as a subset of potential occupational stressors, *not* what potential occupational stressors become. In other words, actual occupational stressors are still firmly located in the teacher's environment, but are perceived differently (in constituting a threat) from the remainder of the set of potential occupational stressors.

Coping mechanisms (box 4) are introduced to deal with actual occupational stressors by the individual, i.e. to deal with that subset of potential occupational stressors that constitute a threat to the teacher's self-esteem or well-being. Coping mechanisms are also partly determined by the teacher's individual characteristics. Teacher stress is conceptualised as being directly related to the degree to which the coping mechanisms are unable to deal with actual stressors, and the degree to which the teacher appraises threat. Lazarus (1967) has argued that stress is the reflection or consequence of coping processes which attempt to reduce the threat. Furthermore, Lazarus (1966) has argued that the amount of stress occurring is determined by the degree of threat, and the quality by the type of coping process employed. Both Lazarus' points have been implicitly adopted in the model presented here.

Teacher stress is primarily conceptualised as a response of negative affect, such as anger or depression, which is usually accompanied by other phenomena which may be regarded as response correlates of teacher stress (box 5). These response correlates may be psychological (e.g. high job dissatisfaction), physiological (e.g. high blood pressure) or behavioural (e.g. absenteeism). The potentially pathogenic nature of the physiological and biochemical changes that accompany teacher stress may not only lead to psychosomatic symptoms (e.g. peptic ulcers) but to even more chronic symptoms such as coronary heart disease and mental ill health (Cooper & Marshall, 1976) (box 6).

Four important feedback loops are also proposed, shown as (a), (b), (c) and (d) respectively in Fig. 1. Firstly, that the coping mechanisms adopted by the teacher to deal with actual stressors may affect the teacher's appraisal of potential stressors, as for example when denial is employed as a coping mechanism (Lazarus, 1966). If successfully employed then the actual stressor will be reduced to the status of a potential stressor (Houston, 1973). This is shown by loop (a). Secondly, that teacher stress itself may also affect appraisals either directly, loop (b), in that a teacher highly dissatisfied with his job may increasingly perceive demands as threats to his self-esteem or well-being, or indirectly, loop (c), by causing ill health which in turn becomes a potential non-occupational stressor itself. Finally, Wild & Hanes (1976) have argued that a feedback loop should be included in a model of stress to represent the fact that failure to meet or cope with demands in the past may affect the individual's future appraisal of his ability to meet or cope with new demands. This is shown by loop (d).

CONCLUSIONS

A definition and model of teacher stress has been presented which essentially conceptualises teacher stress as a response syndrome mediated by an appraisal of threat to the teacher's self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat. It is hoped that the definition and model presented here will enable meaningful research on teacher stress to be undertaken and a better integration of research findings already obtained.

SUMMARY

Research on occupational stress among schoolteachers ('teacher stress') is in an early stage of development. A definition and model of teacher stress is presented that attempts to incorporate the current approaches within occupational stress generally. Teacher stress is essentially conceptualised as a response syndrome of negative affects (such as anger or depression) mediated by an appraisal of threat to the teacher's self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat. This conceptualisation is developed with respect to a model of teacher stress, which it is hoped will enable meaningful research into teacher stress to be undertaken and a better integration of research findings already obtained.

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