The paper addresses the issue of teacher stress and burnout in special education. Prevalence figures are cited to show the widespread nature of the condition and resulting high turnover rates. Sources of stress/burnout among regular educators as well as special educators are identified. It is explained that research has identified a number of factors as related to burnout: sex, marital status, teacher age and number of years teaching experience, level of education, grade level taught, teaching position (resource room versus special class), class size, type of exceptional child taught, and needs deficiencies cited by teachers. Possible links between burnout and job dissatisfaction are noted, and the need for comparative research with other fields is emphasized. (CL)
TEACHER STRESS AND BURNOUT: A REVIEW OF RESEARCH LITERATURE

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Running Head: Teacher Stress and Burnout
TEACHER STRESS AND BURNOUT: A REVIEW OF RESEARCH LITERATURE

The study of "Teacher Burnout", while still a new field of research, is developing rapidly. Each year, the number of research endeavors and published articles has grown dramatically. In reviewing the literature in this area, one finds most articles using the term "stress" while others use the term "burnout". By using the model of teacher stress put forth by Kyriacou and Sutcliffe (1973), a melding of these two terms is possible. In identifying the usages of the term "stress", these authors present two models. The engineering model views stress as environmental forces and factors external to the individual which act upon that person in a stressful way. Such factors as death in the family, divorce, classroom discipline problems, and unpleasant interactions with school administration would all be known as "stress". In contrast, most articles on teacher stress and burnout refer to these external factors as stressors or stress agents, and in this second model, stress is seen as a disturbance of normal functioning which is a response to the environmental stressors related to teaching. Most authors in writing in the area of burnout use the terms "stress" and "burnout" in this latter sense. That is,

"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 andrenocorticotropic hormones into the bloodstream) resulting from aspects of the teachers' job and mediated by the perception that the demands upon the teacher constitute a threat to his self-esteem or well being and by coping mechanisms activated to reduce the perceived threat." (Kyriacou and Sutcliffe, 1978)
With this in mind, studies which used the terms "stress" and "burnout" will be grouped together in this writing. For purposes of clarity, the term used within each specific study will be used in their respective reviews.

Prevalence of Burnout Among Teachers

Incidence figures concerning burnout present an obfuscated picture due to the differing definitions and methodologies utilized in the various studies. However, one image does emerge: teaching is perceived as being a stressful occupation by a large number of its practitioners.

Coates and Thoresen (1976) reviewed a number of studies which reported:

... 17% of 600 teachers were "unusually nervous" and 11% had suffered nervous breakdowns (Hicks, 1933)
... 33% of 110 female teachers displayed nervous symptoms (Peck, 1933)
... 37.5% of 5,150 teachers were seriously worried and nervous (Department of Classroom Teachers of the National Education Association, 1938)
... 10% of teacher absences which exceeded 10 days were due to "nervous conditions" (Randall, 1951)
... 43% of 2,200 teachers reported working under considerable strain and tension (National Education Association, 1951)
... 16.2% of 2,290 responded that they were working under considerable strain, with 61.7% working under moderate strain (National Education Association, 1967)

More recently, other restimates of prevalence and severity of job stress have been forwarded.
A Chicago teachers union (Council for Exceptional Children, *Hot Topics*, 1980) released the results of a survey revealing that 56.5% of 5,500 respondents claimed physical and/or mental illness as a consequence of their profession. An NEA teacher-opinion poll revealed that one-third of teachers would enter another field if they were able to start over. Only 60% of the respondents planned to teach until retirement age.

Saville (1981) found 58% of his sample reporting that they had seriously considered leaving the field because of stress-related problems. Sixty-five percent of his total sample found teaching to be highly stressful. Kyriacou and Sutcliffe (1978) report that almost 20% of 257 teachers queried in England rated teaching as being very stressful or extremely stressful.

Galland (1981) studied former urban area teachers who had resigned. Three quarters of her small sample (N=8) had left the profession due to self-perceived, intolerable stress. Their interview responses indicated that they had become emotionally and physically exhausted in the classroom. Some also mentioned feeling a sense of low personal accomplishment.

McGuire (1979) cites an NEA survey reporting that during the 1970's, the turnover rate for teachers may have doubled over an early sixties estimate of seven to ten percent annually. In 1962, 28% of all teachers had 20 years experience, but in 1976 that number had been reduced to 14% (Council for Exceptional Children, *Hot Topics*, 1980). These figures perhaps reflect a refusal of many teachers to continue to work in a stressful occupational environment.

There is little evidence available which would allow for an estimate of burnout specific to special educators. According to Griffin (1979, p.3)
The Education for All Handicapped Children Act (P.L. 94-142) and its implementation have caused special educators an "unprecedented degree of pressure" as professional roles change and responsibilities become more numerous for teachers. Although Fimian's (1980) research indicates that incidence of stress or burnout may not be as high or intense as other authors have claimed (Block, 1978; McGuire, 1979; Weiskopf, 1980), he still found 46% of special education teachers reporting their profession to be a great to very great source of stress. Kyriacou and Sutcliffe (1979) wrote of finding 30.7% of their sample of special educators in England rating being a teacher as very stressful or extremely stressful. In spite of the fact that these are self report studies lacking validation with stress measurement instruments, and considering the problems of comparing teaching in two different cultures, it appears as if a large number of special educators view their profession as being highly stressful.

Cooper (1980), cites informal studies conducted by regional centers for the deaf-blind and states that the average teacher of the deaf-blind stays on the job for about three years before leaving the field completely.

However, while the incidence of stress in teaching may be no more pronounced than in other professions (Bentz, Hollister, & Edgerton, 1971) the possible negative effects on students must be considered. Based upon minimum incidence figures and pupil-teacher ratios in 1957, Kaplan (1959) estimated that as many as 200,000 teachers may be suffering from the effects of stress and in turn, five million pupils. Given the prevalent belief that teaching today is more stressful than in former times, and given the increased student loads within the classroom, the numbers cited above may be magnified considerably.
As the many studies presently in progress reach completion, and as new research is undertaken, more information concerning the prevalence of burnout among various groups of special educators will become known.

Sources/Causes of Stress/Burnout Among Regular Educators

Teacher self report measures have identified a number of stressors believed to contribute to job dissatisfaction and burnout. Kyriacou and Sutcliffe (1978) report the following to have received high stress ratings by teachers in Britain: (a) pupils' poor attitudes toward work, (b) trying to uphold/maintain values and standards, and (c) covering lessons for absent teachers. Chicon & Koff (1980) found teachers rating the following as the most stressful teaching aspects: (a) involuntary transfer, (b) managing disruptive students, and (c) notification of unsatisfactory performance.

Coates and Thoresen (1976), in their review and analysis of 15 studies dealing with beginning teachers' anxiety, find the following to be the major concerns reported: (a) ability to maintain discipline and behavior control, (b) student-teacher relationships, (c) their own grasp and knowledge of subject matter, (d) what to do in case of a shortage of material or if one makes a mistake, and (e) relations with other faculty, the school system, and parents.

With respect to experienced teachers, Coates and Thoresen's article reported the chief sources of anxiety related to: (a) time demands, (b) difficulties with pupils, (c) increased size of class enrollments, (d) financial constrictions, and (e) lack of educational resources.

Kyriacou and Sutcliffe's (1978) research identified four areas of sources of stress for teachers (N=257). They were: (a) pupil misbehavior, (b) poor working conditions, (c) time pressures, and (d) poor school e
One finds similarities to earlier investigations in a study by Saville (1981) in which teachers (N=1468) reported the following factors as contributing the most stress: (a) overcrowded classrooms, (b) threat of lawsuit, (c) student violence, (d) paper work, (e) disagreement with principal, (f) involuntary transfers, (g) discipline, and (h) loss of personal time.

Lastly, Garland (1981) interviewed teachers (N=8) who listed the following school climate aspects as contributing to their burnout and subsequent resignation from the Boston school system: (a) lack of supplies, (b) inadequate preparation time, (c) insufficient opportunities for professional growth, (d) lack of parental support, (e) low staff relations, (f) administrative ineffectiveness, and (g) principals' poor handling of student discipline. Poor administrative leadership appeared to be the most significant factor contributing to teacher resignation.

On teacher self report measures, then, certain factors are repeatedly named as primary stressors by regular education teachers. Among them are student discipline, rapport with administrators, lack of supplies, and a general concept concerning school environment.

Sources/Causes of Stress/Burnout among Special Educators

A number of reasons have been cited by special educators as contributing to burnout.

Lawrenson (1980), in a survey of teachers of the emotionally disabled, found the major items of dissatisfaction to be: (a) hassles with the administration, (b) inconsistent support staff, (c) clerical and paper work, and (d) lack of recognition for a job well done. Former teachers of the emotionally disabled who had resigned listed the same reasons,
along with availability of a better job and the chance to move closer to one's family.

Cooper (1981) in a study concerning a small group of teachers (N=28) of the multiply handicapped, stated that burnout results due to "organizational elements of the program, including ineffective supervision and problems dealing with the population."

Fimian and Santoro (1980) report the following factors to be strong stressors rated by teachers. Rated from strongest to weakest, they are: (a) inadequate salary, (b) frustration caused by time limitations, (c) frustration caused by poor attitudes and behaviors on the part of administration, (d) the feeling that one's personal priorities are being shortchanged due to professional demand, (e) the lack of recognition for the extra work and good teaching that is done, (f) the unmet need for enhanced status and respect on one's job, (g) frustration caused by poorly motivated students, and (h) the perception that one's class and caseload is too large.

Fimian (1980) lists 12 categories of stressors within which he says all sources of stress will fall. They are: (a) personal competence, (b) self relationship, (c) conflicting values, (d) social approval, (e) isolation, (f) expectations, (g) self-fulfillment, (h) deficiencies in the physical environment, (i) unmet ego needs, (j) self-inflicted stress, (k) professional constraints, and (l) student-teacher relationships.

Bensky, Shaw, Grouse, Bates, Dixon and Beane (1980) also rank ordered factors listed by special classroom (self contained) teachers (N=114) as being most stressful. They are: (a) pupil load; (b) teaching (implementation and preparation); (c) job related work after
hours; (d) interaction with parents regarding placement decisions; and 
(e) parent conferences. For resource room teachers the greatest stressors 
in order were: (a) diagnosis and assessment; (b) pupil load; (c) 
teaching (preparation and implementation); (d) evaluation by supervisor; 
and (e) job related work after hours. Regular education teachers ranked 
(a) diagnosis and assessment; (b) interaction with parents regarding 
placement decisions; (c) job related work after hours; (d) parent 
conferences; and (e) teaching (implementation and preparation).

In another article, (Shaw, Bensky & Dixon, 1981) the following were 
put forth as being "negative stressors"; (a) uncertainty, (b) role 
overload or underload, (c) abrupt and unplanned organizational and role 
changes, and (d) poor job design.

Many of the factors listed in this section are similar to those 
listed by regular educators as being stressors or contributors to 
burnout. Others (diagnosis and assessment, parent interaction) stand 
out as being peculiar to the field of special education.

FACTORS RELATED TO BURNOUT

Most empirical research efforts have used the Maslach Burnout 
Inventory (MBI) developed by Maslach and Jackson (1979) to assess 
degree and pattern of burnout. The instrument consists of three sub-
cales: emotional exhaustion (the feeling of being emotionally drained), 
depersonalization (negative attitudes toward one's students) and 
personal accomplishment (a sense of personal self worth in relationship 
to one's job). Each subscale in turn has two dimensions: frequency 
(how often the feelings occur) and intensity (the strength of perceived 
feelings). Its feasibility for use with teachers is documented by 
Empirical research has identified a number of factors as being related to burnout in teachers. These factors are addressed individually below.

**Sex**

When special educators were grouped according to the background variable of sex, Presley & Morgan (1982) found no differences with respect to burnout. McIntyre (1981), however, found that males had significantly fewer feelings of personal accomplishment than females and scored higher on both dimensions of the Depersonalization subscale indicating that they had more frequent and intense feelings of negative attitudes toward their students. These findings are in agreement with the results of Schwab (1980) and Anderson (1980), while being in partial agreement with those of Raison (1981). Schwab and Anderson, using a mixed group of regular and special educators, obtained the same higher scores for males on the Depersonalization subscale, but Raison did not find males scoring lower on the frequency part of the Personal Accomplishment subscale.

Why the findings of Presley and Morgan and those of McIntyre differ for special education is not apparent. Anderson suggests that males tend to be more depersonalized because society promotes nurturing and caregiving in women while these traits are not developed to the same degree in American males.

**Marital Status**

Raison (1981), using the MBI, found non-married regular education teachers reporting greater frequency of emotional exhaustion and more intense feelings of depersonalization than their married peers, while
special educators who were divorced, separated, or widowed reported more intense and frequent feelings of emotional exhaustion. However, Schwab (1980) in a survey of teachers, and McIntyre (1981) and Presley and Morgan (1982) in surveys of special education teachers found no marital status differences with respect to burnout as measured by the MBI. Reasons for the discrepancy between the studies are not evident, although the influence of some other variable such as years in marriage, supportiveness of spouse, stability of marriage, or quality of singles lifestyle may be an important factor. Number of children was not found to be a factor in burnout (Schwab, 1980).

**Age of Teacher**

McIntyre (1981) found older special education teachers to be faring better with respect to burnout than their younger colleagues. Increasing age was found to be significantly correlated with more frequent feelings of personal accomplishment and negatively correlated with both the frequency and intensity dimensions of the Emotional Exhaustion subscale, and stronger feelings of depersonalization.

Raison (1981) found the same results as stated above and also found younger teachers feeling more frequent depersonalization. However, when McIntyre controlled for the effects of years of teaching and years in present assignment by use of partial correlation, the only significant correlation left was a negative correlation between increasing age and strength of feelings of emotional exhaustion. These results are then the same as those of Schwab (1980), who found younger teachers to feel more "burned out" only on the intensity section of the Emotional Exhaustion subscale.
The teachers in McIntyre's study were also categorized according to age as follows: 20 to 30, 31 to 40, 41 to 50, and over 50 years of age. Significant differences between groups were found. The teachers in the two youngest age groupings scored significantly higher on both dimensions of the emotional exhaustion subscale than their colleagues in the two older groupings. On the frequency of feelings of personal accomplishment dimension, teachers in the 41 to 50 age group reported the greatest feelings of personal accomplishment. No other group differences were found.

Future research endeavors might investigate why younger persons consistently appear more "burned out" than their older colleagues. Possibly expertise and job satisfaction come with age or perhaps most "burned out" teachers drop out of the profession, leaving a greater percentage of "burned out" teachers in the younger groupings who will themselves eventually leave the field.

Years of Experience

Zabel and Zabel (1981), using the MBI, found significant correlations between increasing years of experience and lowered feelings of personal pride on the job. They also found that as years of experience increased, negative feelings toward one's students and feelings of being emotionally exhausted decreased. These findings are contrary to those of McIntyre (1981), who also surveyed special educators and used the same instrument. McIntyre found no significant correlations.

McIntyre also divided his sample into groups by years of experience. Teachers with one to three, and seven to ten years of experience had significantly more frequent feelings of emotional exhaustion than the
other three groupings (four to six, eleven to fifteen, and over fifteen years of experience). On the dimension assessing strength of emotional exhaustion, those with over fifteen years of teaching experience fared better than their less experienced counterparts by having significantly weaker feelings of emotional exhaustion. Also on the intensity dimension of emotional exhaustion subscale of the MBI, Anderson (1980) in her study of general educators found those with over 25 years of experience faring better than those with five to twelve years on the job. Anderson also found older groups feeling a greater sense of personal pride with respect to their jobs than the younger groups.

These findings are in contrast to those of Schwab (1980), who, in a random sampling of public school teachers found no significant differences between groups with respect to burnout on the years of teaching experience variable. Additionally, Presley & Morgan (1981) found number of years of experience to be a poor predictor of burnout.

Level of Education

While level of education does seem to be a factor in burnout for social service professions (Gann, 1979; Maslach & Jackson, 1979), Schwab (1980), McIntyre (1981) and Presley and Morgan (1982) in their studies of regular education and special education teachers found no significant differences due to level of education. Schwab suggested that level of education did not have an effect because obtaining a higher degree does not change a teacher's status in the organization or change his/her job definition as it would in other professions.

Grade Level Taught

Schwab (1980) and Anderson (1980) found both middle school/junior high and high school teachers scoring higher on frequency and strength
dimensions of the Depersonalization subscale of the MBI than their elementary grade level counterparts. These same teachers also reported less frequent and less intense feelings of personal accomplishment when compared to the elementary school group. Schwab had questions as to whether his results reflected a sex difference due to the large percentage of females teaching in elementary schools. Anderson suggests that society is more accepting of younger children, and perhaps discipline problems in the elementary school are less complex and severe. Anderson also found elementary school teachers reporting stronger and more frequent feelings of personal accomplishment. She feels that this may be due to change and growth being more apparent in young children.

However, McIntyre (1981) and Presley and Morgan (1982) in their investigations with special educators, found no difference between teachers at the various grade levels.

One explanation for differences between these studies and those of Schwab and Anderson may be due to differences in the nature of regular education (the main focus of Schwab's and Anderson's research) and special education. Regular educators in middle and high schools see a different group of students during each class period, while those in elementary school deal with the same group all day. Perhaps this contributed to the differences between the two groups in Schwab's and Anderson's study. For special educators in resource and self contained rooms however, the student responsibilities at the different levels are essentially the same. Therefore, there is not the contrast in job responsibility which is evident in regular education.
Teaching Position

McIntyre (1981) and Presley and Morgan (1982) found no significant differences between resource room teachers and teachers in self-contained classes with respect to burnout.

In another study, which used the MBI, Raison (1981) found resource room teachers reporting higher scores on both dimensions of the emotional exhaustion subscale and less frequent feelings of personal accomplishment than those in self-contained classrooms. The results of Raison are similar to those of a study by Bensky, Shaw, Gouse, Bates, Dixon, and Beane (1980) who found 114 regular education teachers and resource room teachers, who were taking a graduate course, reporting a median response of "sometimes" to the question "Do you perceive your job to be stressful?" while self contained classroom teachers had a median response of "seldom."

Crane (1981), however, in a study using the MBI with special educators (N=411) found teachers in self contained classrooms suffering burnout to a larger extent than resource room teachers.

Reasons as to why studies of special educators, using the same instrument, yielded differing results are unknown. In fact, McIntyre and Crane conducted their research at the same time in the same small north-eastern state. Crane used a strictly urban population, but this should not be a factor in the differing results (Schwab, 1980; McIntyre, 1981).

Class Size

Coates and Thoresen (1976), in a review of research, found experienced teachers reporting "increased size of class enrollments" as one of the five chief sources of anxiety, while in a study of 1468 teachers, Saville
(1981) found "overcrowded classrooms" to be the major stressor reported. Similar results were obtained by Zabel and Zabel (1981) who on a self report section of their survey, found that those teachers who perceived their classload as being "too large" reported stronger feelings of emotional exhaustion and negative attitudes toward their students than did those teachers who believed their student load was adequate or too small. In a somewhat different vein, Raison (1980) found a significant positive correlation between the number of disabled students placed in regular education classrooms, and frequency and intensity of feelings of emotional exhaustion reported by these teachers.

Regarding special education teachers, Fimian and Santoro (1980) conducted a survey in which the item, "one's class and caseload is too large", was found to be the eighth strongest stressor reported by the respondents. Another survey of special educators (Bensky, et.al., 1980) found self-contained room teachers reporting "pupil load" as the number one cause of job related stress. Resource room teachers in the same study perceived pupil load to be the second strongest stressor associated with their occupation.

McIntyre (1981), however, approached the subject in a less subjective manner with special education teachers. Daily student load was determined by asking the teachers to count the number of students served during each period of the school day, and to add these numbers together to arrive at a daily load figure. This allowed for comparison between resource room teachers and teachers in self-contained rooms. No significant correlations were found between the amount of daily student load and any of the six aspects of burnout as measured by the Maslach Burnout Inventory.
Additionally, McIntyre divided daily student load estimates into groups for comparison purposes. No significant differences were found between the six groups. Zabel and Zabel (1981) also found results consistent with McIntyre's findings.

The reasons for the disparity between teacher self-report surveys and empirical research could be many. First, this research did not account for the presence of classroom aides which would change the student to adult ratio. Secondly, these studies did not take into account the type and severity of the handicapping condition of the students. Another explanation for this discrepancy may be that teachers do experience increased stress due to enlarged student load, but this stress is not of the strength or type to effect one's attitude toward students, feelings of emotional exhaustion, or sense of personal pride in one's job.

Type of Exceptional Child Taught

While Presley & Morgan (1982) found type of handicapped child taught to be a poor predictor of burnout, and McIntyre (1981) and Crane (1981) found no differences between teachers who taught various exceptionalities, Zabel and Zabel (1981) found teachers of the emotionally disturbed to be more emotionally exhausted than other groups when teachers were rank ordered. Teachers of the gifted and the hearing impaired were also high on this scale of the MBI. Teachers of the trainable mentally retarded and teachers of severely/multiply handicapped students scored lower on burnout measures than did their colleagues.

Meadow's (1981) research shows teachers of the deaf to be more emotionally exhausted, as measured by the Maslach Burnout Inventory,
than teachers of non-handicapped students. Within the deaf educator subgroup, classroom teachers were the most emotionally exhausted, followed in turn by special subject teachers, administrators, supervisors, teacher aides and dormitory staff, and finally support staff. Meadow writes that "the factors creating stress in the normal educational environment are exacerbated in special education settings serving deaf children." She mentions discrepancies between anticipated and actual achievement in deaf students as being sources of guilt and anger for teachers, and believes that conflicts concerning methodology and communication within the field of deaf education cause a great amount of stress.

Size of Community

McIntyre (1981) grouped special educators into categories dependent on the size of the community in which they taught. Categories were: (a) large city; (b) fringe city; (c) medium city; (d) small town-suburban; (e) small town-emerging suburb; (f) small town-rural. No significant correlations were found between size of district and burnout, and no significant differences were found between groups, indicating that size of community does not have an effect on burnout. These findings are in agreement with those of Schwab (1980) who found no differences between groups of teachers teaching in urban, suburban, or rural areas.

Role Conflict and Role Ambiguity

Role conflict, the simultaneous occurrence of two or more sets of inconsistent, expected role behaviors for a teacher, and role ambiguity, the lack of clear, consistent information regarding responsibilities,
rights and duties of a teacher, have been the focus of two studies. Both studies (Schwab and Iwanicki, 1982; and Crane, 1981) found teachers in organizations with high role conflict and ambiguity levels reporting more frequent and intense feelings of emotional exhaustion and negative feeling toward their students. Both studies also found these teachers reporting a minor effect on feelings of professional accomplishment.

Locus of Control

Locus of control, derived from Social Learning Theory (Rotter, 1954), is a measurable psychological construct which provides an understanding of how reinforcement affects an individual's behavior, and how that, in turn, affects the degree to which a person perceives a casual relationship existing between their behavior and resultant reinforcement. In more general terms, it is the degree to which one feels control over various aspects of one's life.

The control construct exists along a continuum from a strong acceptance in external determinism to a strong assumption of internal dominion or command. When an individual perceives reinforcement as being determined by his/her behavior or relatively permanent personal characteristics, this person is said to have an internal locus of control. If, however, an individual views an event which follows a personal action as not being contingent upon that action, but rather due to chance, fate, luck, control of powerful others, or as being unpredictable given the complexity of environmental forces, that person is said to possess an external locus of control. It is important to note, however, that a person is not totally internal or external in orientation. Rather, it is more appropriate to view a person as being more or less internal or
external in their view of their influence in causality of events affecting their lives.

One's ability to cope with environmental stress appears to be influenced by one's locus of control. Persons with an internal locus of control (those who feel they have a good deal of control over events affecting their lives), appear to handle environmental stress better than persons with an external orientation (those who believe that much of their lives is manipulated by luck, fate, chance, or powerful others). For instance, in comparison with internals, those with a more external orientation report more debilitating anxiety, more neurotic symptoms, and more self-punitiveness in response to frustration (Altrocchi, et al., 1968; Butterfield, 1964; Efran, 1963; Feather, 1968; Goss & Morisko, 1970; Hountras & Scharff, 1970; Platt & Eisenman, 1968; Rotter, 1966; Tolar & Resnikoff, 1967; Watson, 1967).

McIntyre (1981), using the Nowicki-Strickland Adult Scale for Locus of Control (1973) to assess locus of control found it to correlate significantly with many aspects of burnout as measured by the MBI. As scores for locus of control increased, indicating a more external life orientation, special education teachers reported more frequent and intense feelings of emotional exhaustion, stronger feelings of depersonalization toward students, and less frequent feelings of personal accomplishment. A near-significant negative correlation (.053) was also mentioned for strength of personal accomplishment. Thus it appears that as teachers reported less control over their lives, they also reported a greater degree of burnout. The findings are also similar with those of Kyriacou and Sutcliffe (1979) who found teachers with an external orientation reporting significantly more job related stress.
They would also be in concert with Meadow (1981) who, using a question which appears on the question, "Are you given the opportunity to influence your own work situation or assignment?" with responses to the MBI. Those who reported a greater degree of personal control within the work environment also reported less emotional exhaustion, lessened depersonalization and a greater sense of personal accomplishment.

A question remains, however, as to whether one variable might be causing the other to change. That is, does the process of "burning out" change one's locus of control, or does one's original orientation make one more susceptible to burn out?

Needs Deficiencies

Lack of needs fulfillment and its relationship to burnout has been the focus of two investigations. Borrowing from Abraham Maslow (1943) the belief that the satisfaction of personal needs is necessary to become self actualized, Anderson (1980) and Sweeney (1981) used an instrument developed by Porter (1962) which assessed these needs (security, sociability, esteem, autonomy and self actualization). Teachers in both studies rated the actual fulfillment of these need levels, and the desired level of needs fulfillment. Needs deficiencies scores were determined by subtracting the actual values from ideal values. Sweeney writes of teachers (N=1295) reporting need deficiencies in all five areas with the area of esteem showing the largest discrepancy followed in order by the areas of actualization, security, autonomy, and sociability. Comparing these results with data from 1968, Sweeney reports an increase in discrepancy in the areas of security, esteem, and self actualization.
Using the categories of esteem and self actualization as indicators of job satisfaction, the results show teachers of low ability students reporting greater discrepancy in both areas than teachers of average and above average ability, indicating that their needs are fulfilled to a lesser degree.

It was in Anderson's research, that fulfillment of needs was first empirically tied to burnout. In this study, the Porter instrument scores were correlated with those on the Maslach Burnout Inventory. Anderson found that teachers who were experiencing more intensity and frequency of burnout also exhibited greater needs deficiencies in the areas of self actualization and esteem. Additional findings revealed that: the social needs of elementary and high school teachers were met to a greater degree than their colleagues in middle schools; elementary school teachers had their esteem and self actualization needs satisfied to a greater extent than teachers on the middle or high school levels; and the security needs of teachers having taught less than five years were met to a lesser degree than teachers who have taught more than four years.

Is Burnout Related to Job Dissatisfaction?

Although Maslach (1978) states that job dissatisfaction and burnout are not synonymous constructs, research with teachers involving satisfaction of needs and burnout (Anderson, 1980; Sweeney, 1981) does indicate a possible connection.

Raison (1980) reported that one of the independent variables which appeared most often in the explanation of the variance of burnout was teachers' perceived likelihood of being a school teacher in five years.
In a similar vein, McIntyre (1981) asked special educators to answer the following question: "If you were free to choose, would you: (a) stay in your present position; (b) change to another job in education; (c) change fields; (d) undecided?" When special educators were grouped into the categories of: would stay in education; would change fields; or is undecided; significant differences were found between the groups. Those who would change fields were more emotionally exhausted from their jobs and had stronger negative feelings toward their students than did others.

CONCLUSION

Much remains to be accomplished with respect to the area of teacher burnout. Although teachers report many different causes of stress and burnout, empirical research has yet to identify causational factors which explain more than a small amount of the variance of burnout. Comparison studies remain to be undertaken between teaching and other professions, and even within sub-disciplines of the education profession itself, to determine if differing burnout levels exist. Additionally more specific investigations remain to be conducted to determine exactly what it is about gender or age that affects burnout. It is a young field of endeavor, and will, most likely, remain a "hot topic" for a long time to come.
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