

Self-Reported Job Stress and Personality in Teachers of Students with Emotional or Behavioral Disorders

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ABSTRACT: *This study examined self-reported stressors for teachers of students with emotional or behavioral disorders (E/BD) using a questionnaire developed specifically for the study. The study examined (a) the relationship between reported stressors and reported willingness to leave an E/BD teaching position, (b) the relationship between reported stressors and three personality traits from the Eysenck Personality Questionnaire-Revised (EPQ-R), and (c) the relationship between the Eysenck personality traits and E/BD teacher-reported injury by students. One expected result was that E/BD teachers reporting the largest number of stressors indicated a greater willingness to leave an E/BD teaching position than their peers with fewer stressors. Importantly, teachers who reported low stress scored significantly lower than teachers who reported high stress on the Psychoticism (P) and Neuroticism (N) scales, but not on the Extroversion (E) scale on the EPQ-R. Teachers who reported low stress were significantly below the normal range for the N scale. Of the sample studied, 19% reported being injured by a student within the past 12 months, a significant increase above those reporting such occurrences in previous studies on teacher injury. Moreover, teachers who had been injured by a student scored significantly higher on Eysenck's P scale than did noninjured teachers, which suggests that such teachers may interact with students in a manner that puts them at greater risk for being injured. The results are discussed, and additional research is suggested.*

■ The widely acknowledged shortage of special education teachers presents a unique challenge for those involved in preparing teachers to serve in the field of emotional and behavioral disorders (E/BD). Numerous factors contributing to this shortage include an increase in the number of students being served in special education, a decrease in the number of students enrolled in college preparatory programs for special education teachers, and an inability to retain teachers in the field (Boe, 1995; Cooley & Yovanoff, 1996). Another study (Seery, 1990) reported an annual attrition rate of 13% for E/BD teachers. It is, therefore, not surprising that E/BD ranks among the top four teaching areas (out of 45) with the most critical shortages (Haselkorn & Calkins, 1993).

Marlow and Hierlmeir (1987), in a study of factors contributing to attrition from the teaching profession, found two broad categories of variables that put a teacher at risk for leaving teaching. The first category was related to the perception that there were better opportunities in the business world. The sec-

ond category included factors that were more specific to education. These factors included negative student attitudes, discipline problems, poor working conditions, and stress. In a more recent study directed at attrition of special education teachers (Miller, Brownell, & Smith, 1995), two variables were found to best predict who would leave special education or transfer to a different teaching field. The two predictor variables were stress and type of certification.

Numerous studies have identified relationships between occupational stress and professional commitment among general education and special education teachers (Billingsley, 1993). Seery (1990) found stress to be one of the reasons reported by E/BD teachers for changing jobs. Cross and Billingsley (1994) found that E/BD teachers reported greater stress and role problems than did other special education teachers. It appears that occupational stress plays a significant role in the loss of E/BD teachers and that they are at greater risk for dropping out of the field when compared to teachers in other disability areas

(McManus & Kauffman, 1991). It is also suspected that stress-related factors contribute to the decrease in the number of people entering the E/BD field (Pullis, 1992). One purpose of the study reported here was to inquire into the possible relationship between self-reported occupational stressors and the professional commitment of E/BD teachers to remain in their positions.

One potential stressor, and an area of concern, was brought to our attention through the number of E/BD teachers reporting to us that they had been injured by their students. Possession of weapons and physical attacks by students are generally perceived by teachers as problems that are on the rise. White, Curry, and Stedman (1994) reported that educators believe the number of students carrying weapons and threatening other students and school personnel with weapons is on the increase. They reported that, during one 12-month period, 2% of teachers surveyed indicated that they had been physically attacked by a student. In another study (Petersen, Pietrzak, & Speaker, 1996), 27% of the educators surveyed indicated that they were concerned or very concerned about their safety at school, and 9% of the sample reported that they had been physically attacked at school within the past 24 months.

If the samples for the Petersen and colleagues' and White and colleagues' studies are comparable, this would suggest that the frequency of physical attacks on teachers has doubled over the course of approximately 6 years. No data specific to special education or E/BD teachers were found. However, it is probable that the risk of physical injury by a student would be greater for a teacher working with students who have E/BD than for teachers in general. It seems logical to hypothesize that injury by students would have a significant impact on stress level and commitment to remain in an E/BD teaching position. Therefore, the extent of teacher injury by students with E/BD was also examined in this study.

Recently, little research has focused on the role of cognitive and affective characteristics such as the personality traits of special educators (Billingsley, 1993) or their possible role in teacher stress and victimization. Two recent studies addressed the personality characteristics of teachers, but neither study looked specifically at special educators in general or

E/BD teachers in particular. Hughes, McNelis, and Hoggard (1987) found that teachers with more extroverted personalities were less susceptible to stress. Conversely, teachers who had a strong emotional component in their personalities were more susceptible to stress. Fontana and Abouserie (1993) found a significant negative correlation between extroversion and teacher stress and a significant positive correlation between neuroticism and teacher stress in a sample of British teachers. The findings by Hughes and colleagues are consistent with those of the Fontana and Abouserie study. Both studies appear to support a relationship between personality traits and teacher stress whereby extroversion increases resistance to stress and neuroticism reduces resistance to stress. The potential role of personality traits in susceptibility to stress suggested by these two studies appears to warrant investigation, given the likelihood of contact with significant stressors experienced by E/BD teachers. Thus, another purpose of this study was to determine whether a relationship exists between E/BD teachers' self-reported stressors and personality variables that might influence their susceptibility to stressors.

A plethora of theories of personality and measures of personality have been generated by psychologists during this century. However, something approaching a consensus about personality has developed only in recent years (Revelle, 1995). The consensus is developing around a model referred to as the *Five-Factor Model (FFM)*, also called the *Big Five* (McCrae & John, 1992). The five traits represented in this model are Extroversion, Emotional Instability, Agreeableness, Conscientiousness, and Openness, which are believed to be grounded in biological rather than psychological or cognitive functioning. There are some critics of the FFM who believe that Openness is a cognitive construct and that two of the factors in the FFM, Agreeableness and Conscientiousness, are part of a higher-order factor labeled *Psychoticism* (Eysenck, 1991a). This alternative model is sometimes referred to as the *Even Bigger Three* or *EB3* (Revelle, 1995) or as the "gigantic three" (Eysenck, 1991b); it includes Extroversion, Neuroticism or Emotional Instability (Eysenck, 1991b), and Psychoticism.

The Eysenck model was selected for this study largely for two reasons. First, this theory of personality is strongly supported by a very

long and continuous history of research and development. Eysenck's dedication to research on personality has made him the most frequently cited psychologist in the world (Gudjonsson, 1997). Eysenck (1991a) pointed out that nearly all large-scale studies of personality find the equivalent of the three traits he proposes, that the traits are found worldwide, that an individual's status relative to the traits is consistent across time, and that research on the genetics of personality support the three traits. Second, the development of the theory and related research has focused on measurement. The instrument associated with the model includes both adult and child versions (Eysenck & Eysenck, 1975, 1993), making comparisons between teachers and students more efficacious for additional research.

The three Eysenckian traits can be characterized briefly as follows. The Extroversion (E) trait is represented by a bipolar scale that is anchored at the high end by sociability and stimulation seeking and at the other end by social reticence and stimulation avoidance. The Neuroticism (N) trait is anchored at the high end by emotional instability and spontaneity and by reflection and deliberateness at the other end. This trait's name is based on the susceptibility of individuals high on the N trait to anxiety-based problems. The Psychoticism (P) trait is anchored at the high end by aggressiveness and divergent thinking and at the low end by caution and empathy. The label for this trait is based on the susceptibility of a significant subgroup of individuals who are high on the P trait to psychotic disorders (Eysenck & Eysenck, 1976). None of the scales is intended as a measure of psychopathology. The scales are measures of temperament source traits that, in interaction with experience, produce personality.

Method

Participants

All registered participants who attended a state-sponsored conference on E/BD were sent a letter soliciting their participation in the present study. Recipients of the letter were asked to return a signed consent form if they taught students with E/BD and were willing to participate. This is an annual conference held by the State Department of Education at both a

northern and a southern location in the state on succeeding days. Letters were sent to the 702 registered participants, not all of whom were teachers, since administrators, school psychologists, students preparing to be teachers, paraprofessionals, and others who work with the E/BD population attend this conference. It is estimated that approximately half the attendees were teachers who taught students with E/BD.

The participants in this investigation consisted of 151 teachers of students with E/BD who returned the signed consent form and an information sheet. The teachers who agreed to participate represented approximately half of the conference participants estimated to be eligible. Of the 151 who agreed to participate, 149 returned the completed instruments and information sheet. The teachers who participated had an average age of 39 years ($SD = 10.1$) with a range of 22 to 64; 85% of them were female, and 91% were white. They had been teaching for an average of 11 years ($SD = 8.6$) and had been teaching students with E/BD for an average of 8 years ($SD = 6.1$). Of the sample surveyed, 15% indicated that they were "interrelated teachers." This is a cross-categorical certification, and such teachers serve students from more than one disability category. These teachers taught students with E/BD, but not exclusively.

Instruments and Procedures

The investigators reviewed a number of studies that included teacher stress as a dependent variable (Billingsley & Cross, 1992; Fimian, Pierson, & McHardy, 1986; Lawrenson & McKinnon, 1982; Littrell, Billingsley, & Cross, 1994; Morgan & Krehbiel, 1985; Pelsma, Richard, Harrington, & Burry, 1989). None of the instruments used in these studies adequately addressed the concerns being reported to us by E/BD teachers. They included variables that were not of direct interest in this study or supplied insufficient information about the assessment instrument used. Therefore, the development of an instrument specifically for use in this investigation was undertaken as follows:

1. A group of 55 graduate students who were E/BD teachers enrolled in summer classes were asked to write down three to five things that most distressed them about

teaching students with E/BD. The investigators compiled a list of all of the items submitted and then eliminated redundant items. This left 50 items with which an initial instrument was constructed. This instrument used a three-point scale, where 0 indicated no experience with the item, 1 indicated the item was not distressing, and 2 indicated the item was distressing.

2. This questionnaire was then administered during the ensuing four terms to other graduate students who were E/BD teachers, with revisions taking place each time. The revisions consisted of rewording unreliable items and testing them again. Items that did not attain a test-retest reliability of .60 over a 2-week period were rewritten or eliminated from the questionnaire using the same criterion. During each trial with the questionnaire, the E/BD teachers were asked to rate how adequately the items covered the things they found distressing about teaching students with E/BD. This measure of construct validity employed a three-point scale (0 = Poor, 1 = Adequate, 2 = Excellent).
3. The final version of the E/BD Teacher Stressors Questionnaire (E/BD-TSQ) consisted of 31 items (see Figure 1). This version had a test-retest reliability over a 2-week period of $r = .91$ ($N = 35$). The final version had an average adequacy rating of 1.54 ($SD = .505$). It was hypothesized on the basis of previous research (Fontana, & Abouserie, 1993; Hughes et al., 1987) that the E/BD-TSQ should have a significant and positive correlation with the Neuroticism (emotionality) scale on the Eysenck Personality Questionnaire-Revised (EPQ-R; Eysenck & Eysenck, 1993). The total score on the E/BD-TSQ correlated with the Neuroticism scale at $r = .35$ ($p < .0001$). Confirmation of this prediction makes a modest contribution toward establishing criterion validity for the TSQ-E/BD.

The EPQ-R consists of 100 questions with a forced-choice Yes or No response. It is a measure of temperament source traits that are thought to constitute a biological basis for overall personality (Eysenck & Eysenck, 1985). The P, E, and N traits are higher-order factors derived from correlations between ob-

1. The number of meetings I have to attend.
2. The amount of time I spend on paper-work.
3. Lack of administrative support for my program.
4. Being looked down on by regular class teachers.
5. Parents who won't get involved.
6. Parents' lack of support for discipline procedures.
7. Being responsible for instruction in too many subjects.
8. Having to work with too many different disabilities.
9. Too many demands for documentation.
10. Inadequate skills in my para-professional.
11. Being responsible for legal requirements, e.g., confidentiality.
12. Inconsistent school-wide discipline practices.
13. Being observed by administrators.
14. Too little classroom space for my program.
15. Unrealistic parental expectations for their child's school performance.
16. Unrealistic parental goals for their child.
17. Lack of motivation in my students.
18. Administrators using my class as a detention room.
19. Having my schedule changed too often.
20. Violent behavior by my students toward me.
21. Students who try to manipulate me.
22. Having to collect data on my students' behavior.
23. Students who are disrespectful toward me.
24. Parents who argue with me.
25. Having to supervise extracurricular activities.
26. Being in an isolated classroom.
27. Frequent turnover of students in my class.
28. Acts of cruelty by my students.
29. Lack of coordination between agencies serving my students.
30. The school politics involved in my job.
31. Lack of good order in my class.

FIGURE 1. The 31 Items Comprising the Emotional and Behavioral Disorders-Teacher Stressors Questionnaire

servable lower-order or primary traits. The constructs are independent of one another, stable across time, and believed to be universal. The EPQ-R has a test-retest reliability, with a 1-month interval between administrations, of $r = .71$ for P, $r = .92$ for E, and $r = .89$ for N. Numerous validation studies have been conducted for the three traits measured by the EPQ-R (Chico & Ferrando, 1995; Eaves, Eysenck, & Martin, 1988; Eysenck, 1967, 1981; Eysenck & Eysenck, 1976). The Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) was revised to improve the psychometric properties of the P scale. Only this scale was modified, and the new version of the scale has correlations with the old version of the P scale of $r = .79$ for males and $r = .76$ for females (Eysenck & Eysenck, 1993).

All of the participants were sent a copy of the E/BD-TSQ and the EPQ-R by mail, with instructions to complete the instruments and return them in an enclosed postage-paid envelope addressed to the investigators. The directions on the E/BD-TSQ read, "On the basis of your *personal experience during the past 12 months*, rate the extent to which you have been distressed by the following." Below this instruction was the three-point scale to be used and the 31 items comprising the questionnaire. The directions on the EPQ-R read, "Please answer each question by marking an X beside the YES or the NO following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question." To remove any potential order effects, half of the subjects were requested to complete the EPQ-R first and half were requested to complete the E/BD-TSQ first.

Results

In the personal information section of the E/BD-TSQ, respondents were asked, "Have you been injured by a student within the past 12 months?" In answer to this questions, 19% ($n = 29$) indicated that they had been injured by a student within the past 12 months. Teachers who had been injured indicated an average of 2.45 injuries ($SD = 1.35$), with approximately 52% of the injuries requiring some type of medical treatment. Respondents were also asked whether they would accept a

TABLE 1
MANOVA Results for Dependent Variables P, E, N, and E/BD-TSQ with the Independent Variables Job and Injury with Two Levels Each

Job Variable	Univariate F-tests with (1,141) DF	
	F	p
E	.60	.439
N	.13	.719
P	.03	.853
TSQ	9.51	.002

Mean TSQ score for those answering Yes to the Job question was 40.23 ($SD = 7.24$, $n = 70$) and mean TSQ score for those answering No to the Job question was 36.48 ($SD = 6.03$, $n = 75$).

Injury Variable	Univariate F-tests with (1,141) DF	
	F	p
E	.45	.502
N	.35	.554
P	8.37	.004
TSQ	.97	.327

Mean P score for those answering Yes to the Injury question was 5.93 ($SD = 3.56$, $n = 29$) and mean P score for those answering No to the Injury question was 4.29 ($SD = 2.43$, $n = 120$).

non-E/BD teaching position if such a position were offered to them. In answer, 47% said they would and 50% said they would not accept such an offer.

A multivariate analysis of variance (MANOVA) was run in which the dependent variables were the P score, the E score, and the N score from the EPQ-R and the score from the E/BD-TSQ (see Table 1). Two independent variables (i.e., Job and Injury) with two levels each (i.e., Yes and No) were used. These were the participants' answers to the questions about willingness to accept a non-E/BD teaching position and about injury by a student. This analysis yielded two simple effects. The first effect was for E/BD-TSQ with Job ($F [1,141] = 9.51$, $p < .002$). The mean

TABLE 2
ANOVA Results of P, E, and N Scores with Three Levels
of Susceptibility to Stressors Derived from E/BD-TSQ Scores

E Scale				
Source	df	MS	F	p
Between	2	68.99	2.66	.074
Within	146	25.98		
Total	148			
N Scale				
Source	df	MS	F	p
Between	2	264.3	8.87	.0002
Within	146	29.8		
Total	148			
Follow-up with the Tukey-B using .05. Significant differences between all three level of Stressor Susceptibility. Mean N scores were 6.72 (<i>SD</i> = 4.5) for Low, 10.56 (<i>SD</i> = 5.4) for Intermediate, and 13.8 (<i>SD</i> = 6.2) for High.				
P Scale				
Source	df	MS	F	p
Between	2	28.8	3.96	.02
Within	146	7.3		
Total	148			
Follow-up with the Tukey-B using .05. Significant differences between the Low and Intermediate groups, and between the Low and the High groups. Mean P scores were 2.94 (<i>SD</i> = 1.5) for Low, 4.8 (<i>SD</i> = 2.9) for Intermediate, and 5.0 (<i>SD</i> = 2.3) for High.				

E/BD-TSQ score for those answering Yes was 40.23 (*SD* = 7.24, *n* = 70) and for No was 36.48 (*SD* = 6.03, *n* = 75). The second effect was for the EPQ-R, P scale with Injury ($F[1,141] = 8.37, p < .004$). The mean for those answering Yes was 5.93 (*SD* = 3.56, *n* = 29) and for No was 4.29 (*SD* = 2.43, *n* = 120).

The second analysis conducted was a one-way analysis of variance (ANOVA) in which the dependent variables were the P score, the E score, and the N score from the EPQ-R (see Table 2). The independent variable Stressor Susceptibility was created by categorizing all of the participants into three groups (i.e., High, Intermediate, and Low) by score on the E/BD-TSQ. The three levels of Stressor Susceptibility were created by defining High as 1 or more standard deviations above the mean on the E/BD-TSQ (*n* = 25), Intermediate as between +1 and -1 standard de-

viations from the mean on the E/BD-TSQ (*n* = 106), and Low as 1 or more standard deviations below the mean on the E/BD-TSQ (*n* = 18). The E/BD-TSQ had a total sample mean of 38.2 and a standard deviation of 6.8. The E/BD-TSQ correlations with the EPQ-R are as follows: E scale ($r = .177, p < .03$), N scale ($r = .352, p < .0001$), and P scale ($r = .202, p < .013$).

Significant differences were found for two of the three dependent variables (see Table 2). A significant difference was obtained for the N Scale ($F = 8.87; p < .0002$). The follow-up with the Tukey-B, using a significance level of .05, indicated significant differences between all three levels of the Stressor Susceptibility variable. The mean N scores for the groups were 6.72 for Low, 10.46 for Intermediate, and 13.8 for High (see Table 3). The second difference found was for the P Scale ($F = 3.96$;

TABLE 3
Mean Scores for P, E, and N for Low,
Intermediate, and High E/BD-TSQ Groups

	<i>P Scale</i>	<i>E Scale</i>	<i>N Scale</i>
Low Group (<i>n</i> = 18)			
<i>M</i>	2.94	11.56	6.72
<i>SD</i>	1.47	4.91	4.66
Intermediate Group (<i>n</i> = 106)			
<i>M</i>	4.80	14.27	10.46
<i>SD</i>	2.92	5.16	5.41
High Group (<i>n</i> = 25)			
<i>M</i>	5.00	14.96	13.80
<i>SD</i>	2.33	4.95	6.16

$p < .02$). The follow-up with the Tukey-B, using a significance level of .05, indicated significant differences between the Low group and the Intermediate group and between the Low group and the High group (see Table 3). The mean *P* scores for the groups were 2.94 for Low, 4.8 for Intermediate, and 5.0 for High (see Table 3).

A descriptive analysis of the E/BD-TSQ was also conducted in which the relative rank for each item was determined, along with the percentage of the respondents who rated the item 0, 1, or 2. The 10 highest-ranked items with their respective mean rating and the proportion of the respondents who gave the item a rating of 2 are shown in Table 4.

Discussion

One revealing finding in this study was the data on teacher injuries by students with E/BD, which to the investigators' knowledge are the only data available on injury rates among E/BD teachers. These data indicate an injury rate for E/BD teachers that is approximately four times that reported by Petersen and colleagues (1996) for teachers in general. Somewhat surprising was the failure to find a significant relationship between injury by students and reported stressors. A possible explanation for the lack of a significant relationship between injury and stress could be related to temperamental differences between injured

TABLE 4
Highest-Ranked Items on the E/BD Teacher Stressor Questionnaire

<i>M</i>	<i>SD</i>	<i>N</i>	<i>Percentage</i>	<i>Item</i>
1.78	.42	149	78%	2. The amount of time I spend on paperwork.
1.78	.43	149	79%	5. Parents who won't get involved.
1.66	.57	149	71%	6. Parents' lack of support for discipline procedures.
1.65	.51	149	66%	9. Too many demands for documentation.
1.38	.68	149	49%	12. Inconsistent school-wide discipline practices.
1.76	.48	149	78%	17. Lack of motivation in my students.
1.59	.52	149	60%	23. Students who are disrespectful toward me.
1.41	.75	149	56%	28. Acts of cruelty by my students.
1.39	.73	149	54%	29. Lack of coordination between agencies serving my students.
1.34	.74	149	50%	30. The school politics involved in my job.

teachers and noninjured teachers. Injured teachers, as a group, have a personality profile that suggests less susceptibility to stressors than do noninjured teachers.

The results of this study support a relationship between the number of teacher-reported stressors experienced over the course of a year and a willingness to accept a non-E/BD teaching position if offered. This is consistent with the previous findings of Billingsley (1993), Cross and Billingsley (1994), Marlow and Hierlmeir (1987), Miller and colleagues (1995), and Seery (1990). Almost half of our sample indicated that they would change to a non-E/BD teaching position if given the opportunity, and these teachers' scores on the E/BD-TSQ indicated susceptibility to a significantly larger number of occupational stressors. This is important, since the shortage of E/BD teachers is one of the most critical of any teaching field (Haselkorn & Calkins, 1993) and E/BD is a teaching field with a very high attrition rate (Lawrenson & McKinnon, 1982; Seery, 1990).

Among the 10 items with the highest E/BD-TSQ ratings are two parent-related items: item 5, parents who won't get involved, and item 6, lack of parent support for discipline procedures. It is possible that the impact of these potential stressors could be affected by better communication with parents and parent education programs.

Demands for documentation and time spent on paperwork could be reduced in some cases and possibly handled in less stressful ways in others. Documentation and paperwork demands might be made less stressful by providing more time for or assistance in meeting these responsibilities. It might also be possible to develop more efficient and less time-consuming ways of meeting these demands.

Other critical items, such as inconsistent school-wide discipline practices, school politics, and lack of coordination between agencies, are related to management style. These stressors could be impacted most easily by changes in policies and in administrative and supervisory personnel.

Interestingly, only three of the top 10 stressors (i.e., disrespect, lack of motivation, and acts of cruelty) appear to be directly associated with students with E/BD. Problems directly related to student behaviors might be modified in part by correcting inconsistent

school-wide discipline practices. These can also be modified by both preservice and inservice programs to better prepare teachers to deal with these problems.

Interestingly, item 20, concerning violent behavior by students toward teachers, did not appear in the top 10 items. This may simply be due to the fact that only one in five teachers reported having experienced injury by a student. Another possible explanation might be that E/BD teachers are more likely to recognize injury by students as an occupational hazard and are somehow desensitized to the threat. Finally, it is possible that because of their higher probability of injury, E/BD teachers engage in a degree of denial as a way of dealing with this very real threat.

The findings related to the EPQ-R are also potentially useful both for better managing the problem of attrition from the teaching field and avoiding teacher injury by students. The finding that teachers who report having been injured by students during the past year are significantly higher on Eysenck's P scale than teachers who report no injuries is not surprising. The P scale, among other things, measures a person's tendencies toward aggressive behavior and low empathy. Thus, it would not be unexpected that teachers who have a temperamental predisposition to behave aggressively themselves would also be injured more frequently by students with E/BD. Since males have, on average, a higher P score than females, it was not surprising to find males representing a larger proportion of the injured group (24%) than their representation in the total sample (15%). This finding raises the possibility that injured teachers, as a group, may have a style of interacting with students with E/BD that puts them at greater risk for injury. Study of such teachers' interaction style could contribute to a better understanding of how teachers come to be injured by their students and might lead to preventive programming strategies.

The temperament findings from the EPQ-R relative to reported stressors, as defined by E/BD-TSQ scores, is also potentially useful. The teachers who were distressed by the fewest stressors had two significant temperamental characteristics. First, they were significantly lower on Eysenck's P scale than were teachers who were intermediate or high on reported stressors. Teachers who were low on reported stressors had P scores that were not,

on average, outside the normal range. However, these teachers' were in the lower segment of the normal range, with a standard deviation score of $-.60$ ($M = 2.94$; $p < .02$). Low P scores are, among other things, associated with tendencies toward interpersonal sensitivity and cautious behavior. With such tendencies, one would expect teachers low on P to be among the least frequently injured by students with E/BD.

The second significant temperament finding relative to stressor levels was related to Eysenck's N scale. E/BD teachers with low stressor scores had significantly lower N scores than teachers with either intermediate or high stressor scores. This finding is consistent with the findings of Hughes and colleagues (1987) and Fontana and Abouserie (1993) that emotionality was related to greater susceptibility to stressors in teachers. However, their findings that high extroversion was related to low susceptibility to stressors were not confirmed.

The teachers with low stressor scores had N scores that were on average below the mean and outside the normal range, with a standard deviation score of -1.3 ($M = 6.72$; $p < .0002$). Low scores on the N scale are associated with, among other things, tendencies toward rational and deliberate behavior as opposed to emotional and spontaneous behavior. The advantages for an E/BD teacher of being predisposed toward a deliberate and rational interaction style are clear. These tendencies, combined with a predisposition toward interpersonal sensitivity and caution, produce a temperamental profile of the type of individual who appears to be well suited to cope with the stressors associated with being an E/BD teacher.

One question raised by this study is, Do teachers who have high P scores exhibit behavioral styles that increase their risk for being injured by students? And if so, can their behavioral style be modified through education in a way that reduces the risk of being injured? Another question suggested by this study is, Are teachers whose temperament pattern matches the pattern of teachers with low reported stressor scores more effective teachers? There are also a number of possible questions that could be raised that relate to the temperamental goodness-of-fit between teachers and students using Eysenck's personality traits (e.g., referral rates, discipline prob-

lems, instructional problems). Temperamental goodness-of-fit between teachers and student teachers might also be a useful relationship to investigate.

The results of this study are limited by the volunteer effects of the sample, which is unavoidable given the necessity of obtaining informed consent from participants. A more diverse sample might be obtained if some incentive for participation could be made available in a future study. The population from which the sample was taken was limited to persons in attendance at a State Department of Education-sponsored conference on students with E/BD. It is, however, a popular conference that is well attended by individuals from school systems and teacher preparation programs from across the state. Another limitation of the sample is that it consists primarily of educators from one state. A replication and extension of the study needs to be done employing a sample that is more geographically diverse.

Conclusion

The results of this study indicate that the higher an E/BD teacher's susceptibility to occupational stressors the more willing he or she is to leave the E/BD teaching field. Only 3 of the top 10 stressors identified by the study were related to students. The findings also indicate that susceptibility to occupational stressors associated with teaching students with E/BD is related to a teacher's temperament. The study found an injury rate of approximately one in five among the E/BD teachers in its sample, and teacher injury by students was associated with teacher temperament. Teacher temperament, therefore, seems to be a variable that has potential for helping the profession better understand which teachers are at greatest risk for both attrition and injury. Finally, good solutions for such problems depend upon a full understanding of all the contributing variables, including teacher variables.

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