

## The EBD Teacher Stressors Questionnaire

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### Abstract

The investigators describe two validity studies on a self-report instrument that assesses occupation stressors in teachers of students with emotional and behavioral disorders (EBD). Center and Callaway (1999) developed the EBD Teacher Stressors Questionnaire (EBD-TSQ) to study the relationship between susceptibility to job related stressors and job commitment, injury by students, and personality in EBD teachers. This study will report the results of two new validation studies on the instrument. If the EBD-TSQ is a valid measure of susceptibility to stressors in EBD teachers, one would expect to find differences between low and high scorers in their stress management resources. Further, if the EBD-TSQ is a measure of stressors that EBD teachers are especially likely to be subjected to then there should be significant differences in the way EBD teachers and general education teachers respond to the items on the questionnaire. The two studies reported examine data bearing on these issues. Differences were found in the stress management resources of low and high scoring EBD teachers on the EBD-TSQ. Significant differences were also found between EBD and general education teachers on most of the EBD-TSQ items. Further, a discriminant function analysis correctly classified EBD and regular education participants with 80 percent accuracy. Finally, no significant difference was found between the scores of EBD teachers and other types of special education teachers on the EBD-TSQ. This suggests that the instrument is probably assessing stressors common to special education teachers overall and might be applicable to all special education teachers.



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 behavior disorders (EBD). Factors contributing to this shortage include an increase in the number of students 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 (Cooley & Yovanoff, 1996; Boe, 1995). Illustra-

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tive of the level of the attrition problem is a statewide study by Seery (1990) that reported an annual attrition rate for EBD teachers of 13%. It is, therefore, not surprising that EBD 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 categories of variables that put teachers at risk for leaving teaching. The first category included perceptions by teachers that there were better opportunities in the business world. The second 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.

Many studies have identified a relationship between occupational stress and professional commitment in both general education and special education teachers (e.g., Billingsley, 1993). Cross and Billingsley (1994) found that EBD teachers reported greater stress and role problems than did other special education teachers. A recent study by Miller, Brownell, and Smith (1999) found those special education teachers who transferred or left teaching were significantly higher on perceived stress than those who stayed in their teaching positions. Wisniewski and Gargiulo (1997) in a comprehensive review of the literature on occupational stress and burnout found stress to be a major contributor to burnout in special education teachers. Their review found that for teachers of students with emotional and behavior disorders stress and burnout have reached crisis proportions. Further, stress in EBD teachers was related to transfers by these teachers to general education positions and to leaving the teaching profession. Singh and Billingsley (1996) in a comparison of EBD teachers with other special education teachers found that stress in all special education teachers made a significant contribution to job satisfaction, and job satisfaction affected their professional commitment and intent to stay in teaching. They also found that the effect of stress on job satisfaction and commitment was greatest in EBD teachers. It appears that occupational stress plays a significant role in the loss of EBD teachers, and EBD teachers are at greater risk for dropping out of the field when compared with teachers in other disability areas (McManus & Kaufman, 1991). It is also suspected that stress-related factors contribute to decrease in the number of people entering the EBD field (Pullis, 1992).

Many studies have examined stress in special education teachers (Billingsley & Cross, 1992; Billingsley, & Cross, 1994; Lawrenson, & McKinnon, 1982; Littrell, and Morgan, & Krehbiel, 1985). Billingsley and Cross (1992) in a study comparing special and general educators found

that stress in special educators diminished job satisfaction and professional commitment. Cross and Billingsley (1994) replicated this finding in a study of special educators, which included teachers of students with emotional disturbance. This study found that teachers of emotionally disturbed students reported higher levels of stress than other special educators. Litterell, Billingsley and Cross (1994) found stress in special educators related to a perception of weak emotional support from principals. Emotional support was the strongest form of support and was the best predictor of job satisfaction and commitment. Morgan and Krehbiel (1985) in a study of burnout in EBD teachers concluded that personality variables (not specified) combined with job stressors produced their stress. The stress interacted with a predisposition to emotional problems and so to burnout. These researchers recommended more research into the role of personality variables.

The literature leaves little doubt about the link between stress and occupational burnout in special education teachers and especially EBD teachers. Susceptibility to stress is an important determinant of a teacher's desire to either remain in or leave the profession. An important and unanswered question is why occupational stressors drive some teachers out of the profession and not others. Hobfoll (1988) argues that the critical difference in response to stressors is a difference in available resources for coping with stress. Hobfoll suggests that we are all engaged in attempts to develop effective stress coping resources. The better those resources are the less susceptible we are to the presence of stressors in our life and work. Therefore, we predicted that teachers who report stress from many potential stressors will also report fewer stress coping resources. Further, emotional arousability is related to learning (Eysenck, 1967). Individuals disposed to high emotional arousability exhibit a decrease in learning, particularly when attempting complex learning. Eysenck's Neuroticism (N) trait, a measure of manifest anxiety, is based on a temperamental predisposition to emotional arousability. We assumed that developing successful stress coping resources is a form of complex learning. Therefore, we predicted that individuals high on Eysenck's N trait will be susceptible to more potential stressors. This prediction already has some support in the literature on teacher stress (Fontana, & Abouserie, 1993; Hughes, McNelis, & Hoggard, 1987).

## Method

### *Prior Research*

Center and Callaway (1999) developed a measure of EBD teacher susceptibility to occupational stressors, the *EBD Teacher Stressors Questionnaire* (EBD-TSQ), that consisted of 31 items (see Figure 1). This initial study

established the test-retest reliability for the EBD-TSQ at  $r = .91$  ( $n = 35$ ) over a two-week period. It also evaluated the content validity of the instrument by having, EBD teachers ( $n = 35$ ) rate the adequacy of the items on the scale for assessing potential occupational stressors. The evaluation of content validity employed a three-point scale (0 = Poor, 1 = Adequate, 2 = Excellent) and had an average adequacy rating of 1.54 ( $SD = .505$ ).

1. The number of meetings I have to attend.
2. The amount of time I spend on paperwork.
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 paraprofessional.
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 Behavior Disorders — Teacher Stressors Questionnaire.

Initial validation of the instrument also tested the prediction discussed above that there would be a relationship between the N trait and susceptibility to stressors. The test of this prediction hypothesized a significant and positive correlation between the Neuroticism (emotionality) scale on the *Eysenck Personality Questionnaire - Revised* (H. Eysenck, & S. Eysenck, 1993) and the EBD-TSQ. The total score on the EBD-TSQ correlated with the Neuroticism scale at  $r = .35$  ( $p < .0001$ ). Confirmation of this prediction

made a modest contribution toward establishing criterion validity for the EBD-TSQ.

In the present report we examine two additional validity issues. Study One examined the hypothesized relationship between reported susceptibility and occupational stressors and stress coping resources. The second study examined the discriminant validity of the EBD-TSQ. Specifically, the second study tested the instrument's ability to differentiate between general class teachers and EBD teachers and between EBD teachers and other special education teachers.

### *New Studies*

*Study One.* Center and Callaway evaluated a statewide sample of EBD teachers ( $n = 149$ ) with the EBD-TSQ. We asked participants in that study who scored at or more than plus or minus one standard deviation from the mean on the EBD-TSQ ( $M = 38$ ,  $SD = 7$ ) to complete another instrument. Forty-three of the subjects were outliers by the above definition. Eighteen participants had low EBD-TSQ scores and 25 had high scores. We sent the CRIS (described below) by mail, to this sub-sample accompanied by a letter requesting their participation in the follow-up. We included the instructions for completing the instrument in the cover letter. Sixteen of the low score participants and 19 of the high score participants responded to the follow-up request.

*Participants:* The sub-sample used in the follow-up had the following characteristics. The 16 participants with low scores on the EBD-TSQ had an average age of 38.9 years ( $SD = 17.7$ ). Ninety-four percent were female and 6% were male. Likewise, 94% were white and 6% were African-Americans. The average years of experience in teaching was 11.2 years ( $SD = 10$ ) and the average years of experience as a teacher of EBD students was 9.18 ( $SD = 8.5$ ). The 19 participants with high scores on the EBD-TSQ had an average age of 35.5 years ( $SD = 11.1$ ). Ninety-five percent were female and 5% were male. Likewise, 95% were white and 5% were African-Americans. The average years of experience in teaching was 10.7 years ( $SD = 7.16$ ) and the average years of experience as a teacher of EBD students was 8.35 ( $SD = 5.41$ ).

*Follow-up:* The follow-up assessment employed *The Coping Resources Inventory for Stress* (CRIS) (Matheny, Curlette, Aycok, Pugh, & Taylor, 1992). The CRIS is a reliable and valid measure of stress coping resources (Matheny, Aycok, Curlette, & Junker, 1993). The reported reliability for the CRIS is .88 for internal consistency and .86 for test-retest over a four-week period (Matheny, et al., 1993). The authors report more than 50 validity studies on the CRIS that strongly support its use as a measure of coping resources. The CRIS consists of 12 primary scales and three composite scales (see Figure 2). If the EBD-TSQ is a valid instrument, one would

predict that low and high scorers on the instrument would show differences in their resources for handling stressors.

*CRIS Scales:*

1. *Self-Disclosure* measures one's tendency to disclose freely feelings, troubles, thoughts, and opinions.
2. *Self-Directedness* measures the degree one respects one's own judgment for decision making and interpersonal assertiveness.
3. *Confidence* measures one's ability to gain mastery over obstacles and to exercise emotional control in order to reach personal goals.
4. *Acceptance* measures one's acceptance of personal shortcomings and imperfections and to be tolerant of and positive toward others.
5. *Social Support* measures the availability and use of a social network to help cope with stressful life events.
6. *Financial Freedom* measures the extent to which one is free of burdensome financial constraints.
7. *Physical Health* measures one's perception of the degree of any physical health problems or disabilities.
8. *Physical Fitness* measures the extent of one's health and fitness practices.
9. *Stress Monitoring* measures one's awareness of tension and the presence of events likely to be stressful.
10. *Tension Control* measures one's ability to reduce arousal cognitively and through relaxation procedures.
11. *Structuring* measures one's ability to organize and manage resources such as time.
12. *Problem Solving* measures one's ability to find solutions to personal problems.

*Composite Scales:*

1. *Cognitive Restructuring* measures the ability to modify thinking to reduce stress.
2. *Functional Beliefs* measures beliefs that help prevent stress and lower arousal.
3. *Social Ease* measures the degree of one's interpersonal comfort.

Figure 2. Brief description of CRIS scales based on descriptions given in Matheny, et al. (1993).

**Results:** Low stress scorers on the EBD-TSQ had higher or better stress management scores on ten of the 12 primary scales. These included the following scales: Self-Disclosure, Self-Directedness, Confidence, Acceptance, Social Support, Physical Health, Stress Monitoring, Tension Control, Structuring (Self-Management), and Problem Solving. The low EBD-TSQ group also had higher or better stress management scores on all three of the CRIS composite scales. The three composite scales are Cognitive Restructuring, Functional Beliefs, and Social Ease.

Differences between the two groups were statistically significant on three of the primary scales. The low EBD-TSQ group scored significantly better on the Confidence Scale ( $F = 8.68, p < .006$ ). This scale measures confidence in one's ability to cope with life stress, control stressful events and control one's emotions. The second scale the low EBD-TSQ group scored significantly better on was the Acceptance Scale ( $F = 4.93, p < .03$ ). This scale measures one's perception of how accepting one is of self, others, and the world, including personal shortcomings, individual differences in

others, and frustrations in daily life. The high EBD-TSQ group had a higher or better stress management score on the Physical Fitness Scale ( $F = 4.29, p < .05$ ). The Physical Fitness Scale is a measure of one's habits related to physical activity and exercise. The differences between the two groups were statistically significant on one composite scale. The low EBD-TSQ group had a higher or better stress management score on the Functional Beliefs Scale ( $F = 9.25, p < .005$ ). The Functional Beliefs Scale is a measure of beliefs that are helpful in preventing or lowering stress. This includes the belief that one can be happy in the face of disapproval, that one does not have to be competent in all things to be worthwhile, and the world does not have to conform to one's wishes for life to be satisfying.

*Study Two.* This study investigated the ability of the EBD-TSQ to differentiate between general class teachers and EBD teachers and between EBD teachers and other special education teachers. The EBD sample was the same sample described in Center and Callaway (1999). We obtained general education and special education samples from a large diverse school district with urban, suburban and rural components. We solicited participation from all seventy-seven schools in the system. The schools that agreed to participate included elementary, middle and high schools. The principal of each participating school was sent a letter that explained the proposed data collection and asked that he or she randomly select a total of five general class and special education teachers from the faculty and give each of them a consent form. The consent form included a short description of what participation by the teacher required. We also included a return envelope for each form.

Of the 385 consent forms distributed, 232 or 60% were returned. Questionnaires were then sent to the 123 general class teachers and the 109 special education teachers who agreed to participate. Of the 232 questionnaires sent out, 207 or 89% were returned, which included 123 general education teachers and 95 special education teachers. We used the forms submitted by the 95 special education teachers participating to determine their teaching assignments. Twenty-three EBD teachers were removed from the sample. The remaining 72 special education teachers were either teachers of students with mild intellectual disabilities, learning disabilities or classified as interrelated (cross categorical) special education teachers. The only modification made in the instrument for regular class teachers was to drop EBD from the title and to change the wording in Item Four in which "...regular class teachers." was changed to read "...other teachers."

*Participants:* The characteristics of the sample are as follows. The 123 general education participants had an average age of 42.9 years ( $SD = 9.15$ ). Ninety-five percent were female and 5% were male. Ninety-four percent were white, 3% were African-Americans and 3% were from other backgrounds. The average years of experience in teaching was 16.2 years ( $SD = 8.85$ ). The 72 special education participants had an average age of 39.6 years

( $SD = 12.9$ ). Ninety-six percent were female and 4% were male. Ninety-five percent were white, 4% were African Americans and 1% were from other backgrounds. The average years of experience in teaching was 12.9 years ( $SD = 9.08$ ).

**Results:** Two types of analysis were used in the comparison of the EBD teachers' data with the general class teachers' data. The first analysis was a One-way ANOVA contrasting the two groups on each of the EBD-TSQ items and the total score. The mean total scores were significantly different ( $F = 94.18, p < .0001$ ). The EBD teachers had a higher total score ( $M = 38.2, SD = 6.86$ ) than the general class teachers ( $M = 29.4, SD = 8.89$ ). All statistically significant item differences involved higher scores for EBD teachers. There was a significant difference between the groups on 22 of 31 items or 71% (see Table 1). The second analysis was a simple discriminant function analysis. The Wilks' Lambda obtained was .537, which is equivalent to  $F = 42.73$  and is significant at  $p < .0001$ . The discriminant function analysis correctly classified 80% of the participants based on their response to the EBD-TSQ. This clearly demonstrates that the EBD-TSQ items do discriminate among the two groups of teachers. The specific items identified by the analysis as the best discriminating items were:

4. Being looked down on by (other or regular class) teachers.
5. Parents who won't get involved.
10. Inadequate skills in my paraprofessional.
11. Being responsible for legal requirements, e.g., confidentiality.
20. Violent behavior by my students toward me.
21. Lack of coordination between agencies serving my students.

There was no significant difference between the total EBD-TSQ scores for the original sample of EBD teachers and the new sample of special education teachers ( $F = .087, t = -4.18, p < .77$ ). The special education teachers had a lower mean score ( $M = 34.12, SD = 6.8$ ) than the EBD teachers ( $M = 38.24, SD = 6.8$ ). Since the results of the t-test indicated no statistically significant difference between the EBD-TSQ scores of the EBD teachers and other types of special education teachers, no further analysis was done on this data.

## Discussion

In an earlier study (Center & Callaway, 1999), the EBD-TSQ identified a distribution of susceptibility to job related stressors in EBD teachers. In that study, high scoring EBD teachers were significantly more likely to want to leave their position as a teacher of students with EBD. Further, we iden-



Table 1  
*Results of an One-way ANOVA contrasting EBD teachers with general education (RED) teachers on the EBD-TSQ items.*

Item	Group	N	Mean	STD	F	Sig
1	EBD	149	1.383	0.488	2.463	0.118
	RED	158	1.475	0.538		
	ANOVA					
2	EBD	149	1.779	0.417	0.433	0.511
	RED	158	1.81	0.425		
	ANOVA					
3	EBD	149	1.201	0.626	23.86	0.0001
	RED	158	0.848	0.64		
	ANOVA					
4	EBD	149	1.04	0.706	45.035	0.0001
	RED	158	0.538	0.604		
	ANOVA					
5	EBD	149	1.779	0.433	29.754	0.0001
	RED	158	1.411	0.706		
	ANOVA					
6	EBD	149	1.664	0.565	14.333	0.0001
	RED	158	1.373	0.761		
	ANOVA					
7	EBD	149	1.389	0.601	11.949	0.001
	RED	158	1.139	0.663		
	ANOVA					
8	EBD	149	1.342	0.555	5.462	0.02
	RED	158	1.165	0.756		
	ANOVA					
9	EBD	149	1.651	0.506	0.434	0.51
	RED	158	1.608	0.637		
	ANOVA					
10	EBD	148	0.824	0.762	41.773	0.0001
	RED	157	0.325	0.58		
	ANOVA					
11	EBD	149	1.195	0.475	35.341	0.0001
	RED	158	0.842	0.559		
	ANOVA					
12	EBD	149	1.376	0.683	22.495	0.0001
	RED	158	0.987	0.749		
	ANOVA					
13	EBD	149	1.054	0.399	1.789	0.182
	RED	158	0.987	0.465		
	ANOVA					
14	EBD	149	1.081	0.632	1.527	0.217
	RED	158	0.987	0.686		
	ANOVA					
15	EBD	149	1.215	0.683	1.064	0.303
	RED	158	1.133	0.706		
	ANOVA					

(table continues)

Item	Group	N	Mean	STD	F	Sig
16	EBD	149	1.228	0.699	1.635	0.202
	RED	158	1.127	0.693		
	ANOVA					
	EBD	149	1.758	0.474	7.952	0.005
	RED	158	1.576	0.641		
	ANOVA					
18	EBD	149	0.557	0.72	25.439	0.0001
	RED	158	0.215	0.442		
	ANOVA					
19	EBD	149	0.859	0.735	4.086	0.044
	RED	158	0.69	0.731		
	ANOVA					
20	EBD	149	1.007	0.758	68.158	0.0001
	RED	158	0.348	0.638		
	ANOVA					
21	EBD	149	1.289	0.536	17.911	0.0001
	RED	158	0.981	0.718		
	ANOVA					
22	EBD	149	1.315	0.534	2.577	0.109
	RED	158	1.203	0.684		
	ANOVA					
23	EBD	149	1.591	0.52	34.004	0.0001
	RED	158	1.152	0.767		
	ANOVA					
24	EBD	149	1.201	0.771	5.467	0.02
	RED	158	0.987	0.829		
	ANOVA					
25	EBD	149	0.57	0.65	0.009	0.923
	RED	158	0.563	0.643		
	ANOVA					
26	EBD	149	0.785	0.703	19.794	0.0001
	RED	158	0.456	0.593		
	ANOVA					
27	EBD	149	1.027	0.735	12.757	0.0001
	RED	158	0.715	0.791		
	ANOVA					
28	EBD	148	1.412	0.746	55.417	0.0001
	RED	158	0.734	0.84		
	ANOVA					
29	EBD	149	1.389	0.742	151.542	0.0001
	RED	158	0.405	0.658		
	ANOVA					
30	EBD	149	1.342	0.742	13.847	0.0001
	RED	158	1.013	0.806		
	ANOVA					
31	EBD	149	0.96	0.752	17.171	0.0001
	RED	158	0.62	0.683		
	ANOVA					
TSQ	EBD	149	38.242	6.857	94.181	0.0001
	RED	158	29.411	8.889		
	ANOVA					

tified several concerns in EBD teachers with high scores on the EBD-TSQ that could prove useful in developing strategies to retain EBD teachers who appear disposed toward leaving their positions. Interestingly, only three of the top ten stressors identified in Center and Callaway (1999) were directly associated with EBD students, (i.e., disrespect, lack of motivation, and acts of cruelty). The other top concerns involved parents, administrative duties, and school policies.

One of the new studies reported here demonstrates clear differences in three resources that high and low scorers on the EBD-TSQ could use for coping with job related stressors. It is likely that other differences in coping resources would be found using a larger sample than was available for this investigation. First, the low scoring group on the EBD-TSQ shows significantly more confidence in the ability to cope with stress and gain mastery over both work and personal environments. Confidence allows one to work well under pressure and is a critical defense against stress. Resources recommended for working on a lack of confidence include works by Matheny and Riordan (1992) and Anthony (1984). Second, the low scoring group also showed significantly more acceptance of self and others. Such acceptance helps one deal with personal imperfections and shortcoming and to show a positive tolerance toward others. Acceptance is important for handling stress because it leaves more personal energy free for dealing with stressors. Resources recommended for working on problems with self-acceptance include works by Sanford and Donovan (1985) and Branden (1988). Finally, the low scoring group exhibited significantly more functional beliefs about life and their role in it. Functional beliefs lead to what Ellis (1977) has called "self-enhancing beliefs." Persons with such beliefs generally interpret stressful situations in a way that reduces or avoids negative emotional arousal. Resources recommended for working on deficits in functional beliefs include works by McWilliams (1995) and Ellis and Powers (1998).

The other new study reported here demonstrates that the EBD-TSQ does address stressors that are of particular concern to EBD teachers. Seventy-one percent of the items were found to differ significantly between EBD teachers and general class teachers. While reducing the number of items on the EBD-TSQ might be possible, it does not seem to the authors to be appropriate. Since the purpose is to assess susceptibility to job related stressors, having some items that would be common to both EBD teachers and general class teachers should be useful. Such generally stressing items are also a part of the working environment of EBD teachers and contribute to their level of exposure to job related stressors. Some common stressors were things like the number of meetings, the amount of paperwork, being observed by administrators, and unrealistic parent expectations.

The comparison of EBD teachers with other special education teachers on the EBD-TSQ suggests that the instrument is probably assessing stres-

sors common to most special education teachers rather than just those to which only EBD teachers are susceptible. Thus, it is likely that the other findings for EBD teachers and EBD teachers in comparison to general education teachers would also apply to other special education teachers as well. Further research is needed to confirm this possibility. Given the results of the comparison of EBD teachers with other special education teachers, it might be more appropriate to rename the instrument the SPE-TSQ.

The EBD-TSQ appears to be a reliable and valid instrument for assessing susceptibility to job related stressors in EBD teachers and possibly special education teachers overall. This type of assessment could be useful for screening and identifying teachers at-risk for leaving EBD positions or other special education positions. In particular, new EBD teachers and possibly other new special education teachers should probably be given the EBD-TSQ or a similar instrument at the end of their first year of teaching as part of a systematic retention program. The EBD-TSQ in combination with an instrument like the CRIS could also be useful in helping to plan and carrying out in-service programming directed at helping EBD teachers and other special education teachers to better manage some of their job related stressors. It might also be useful for identifying job related stressors that administrators need to address.

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