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Teacher Distress and the Role of Experiential Avoidance

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Abstract

Teachers' psychological wellbeing is important for teachers and students, but is highly stressful, particularly in special education. We examined the role of experiential avoidance (EA) in the wellbeing of 529 middle and elementary school teachers. EA involves the tendency to avoid thoughts, feelings, and other internal experiences even when doing so causes long-range consequences. Using a teacher-specific measure, we investigated its relationship to stress associated with student misbehavior and limited social support. We assessed EA's relationship to burnout and depression, finding EA significantly and moderately correlated with depression and all scales of Maslach's Burnout Inventory. Mediation analyses showed EA mediated the relationship between stress associated with student behavior and measures of wellbeing. We found 26.8% of teachers mildly, 8.9% moderately, and 2.8% moderately severely or severely depressed. This evidence concurs with studies showing the value of mindfulness-based interventions and points to the utility of implementing interventions aimed at decreasing EA in teachers.

Teaching can be stressful and may hamper teachers' relationships and effectiveness with students and lead many teachers to leave the profession. Recent research indicates that trying to avoid one's feelings may be key in developing varied psychological problems. This is called experiential avoidance (EA). We examine its role in teachers' psychological wellbeing, specifically, whether EA among teachers mediates and/or moderates the relationship between common stressors and the experience of burnout or depression.

Psychological Wellbeing Among Teachers

Teachers' psychological wellbeing is important for them and for their students (Hinds et al., in press). There is evidence of high rates of depression among teachers. Biglan, Layton, Jones, Hankins, and Rusby (2013) found that 50% of staff working at a preschool for children with developmental disabilities reported levels on the *Center for Epidemiologic Studies Depression Scale (CES-D)* that were above the cutting score of 16. Jurado, Gurpegui, Moreno, and de Dios (1998) reported that 27.5% of a sample of 233 primary and secondary grade teachers in Spain were above this cutting score. Jeffcoat and Hayes (2012) reported that 60% of a sample of 236 school district employees met criteria for depression on the General Health Questionnaire (Goldberg et al., 1997). We could not, however find any population-based estimated of the prevalence of depression among teachers.

Bauer et al. (2006) reported that 32.5% of a sample of 408 teachers in Germany reported experiencing burnout. Nearly 18% reported severe strain and 35.9% reported decreased ambition and withdrawal from involvement in work. Burnout is defined by three constructs: (a) emotional exhaustion, in which the person feels physical fatigue and a lacking in emotion; (b) depersonalization, in which the person feels a lack of personal connection with others; and (c) feelings of personal accomplishment (Maslach, Jackson, & Leiter, 1997). Burnout is associated with poorer health (Hakanen, Bakker, & Schaufeli, 2006) and higher levels psychological and psychosomatic symptoms (Bauer et al., 2006).

Substance use also appears to be a significant problem for many teachers. One study found that 20% of teachers reported drinking too much while 15% considered themselves to be alcoholic (Jarvis, 2002). Watts and Short (1990) studied a stratified random sample of 500 Texas teachers. They found that they had higher rates of lifetime alcohol, amphetamine, and tranquilizer use than did a national sample of non-teachers. Fimian, Zacherman, and McHardy (1985) found that across five samples of teachers, 6 to 11% reported a serious need to self-medicate to manage stress and 3 to 11% did so on a daily or nearly daily basis.

Not surprisingly, given the psychological and behavioral problems reported by teachers, they also have significant physical illnesses. Jarvis (2002) found that 25% had health problems such as hypertension, insomnia, depression, and gastrointestinal disorders.

Stressors Influencing Psychological Distress among Teachers

Chronic stress is associated with a range of problems including occupational burnout (Maslach, Schaufeli, & Leiter, 2001), anxiety (Makinen & Kinnunen, 1986), depression (Schonfeld, 1992), and leaving the field of teaching—with higher rates of stress-related attrition for special educators (Boe, Bobbitt, Cook, & Weber, 1995). Stress is also associated with diminished quality of teaching (Minarik, Thornton & Perrault, 2003), reduced tolerance for misbehavior (Kokkinos, Panayiotou, & Davazoglou, 2005), and increased use of harsh discipline (Gerber, Whitebook, & Weinstein, 2007), all of which affect students' school experiences and ability to learn.

One of the most commonly cited stressors reported by teachers is difficult student behavior (Antoniou, 2006). There is some evidence for gender differences in this regard. Some studies find that females report significantly more stress related to student misbehavior behavior compared with males (Klassen & Chiu, 2010), while other studies have found no gender differences (Jepson & Forrest, 2006). Teacher perceptions of difficult student behavior are associated with depression and anxiety (Ferguson, Frost, & Hall, 2012).

Many studies indicate that lack of collegial support is important for wellbeing. Variables such as perceived lack of support and recognition, professional isolation, and difficult interpersonal interactions are related to higher stress levels (Burke, Greenglass, & Schwarzer, 1996). Some studies suggest that women are particularly impacted by lack of support and conflicted interactions with colleagues (Antoniou, 2006). Conversely, collegial support can buffer the impact of stress (Greenglass, Burke, & Konarski, 1997) and is associated with fewer negative psychological health outcomes (Griffith, Steptoe, & Cropley, 1999).

The Role of Experiential Avoidance in Teachers' Psychological Wellbeing

The ways people react to or cope with stressors influence the impact of stressful conditions on their wellbeing (Lazarus & Folkman, 1984). Experiential avoidance (EA) seems key to understanding these relationships. EA has been defined as the tendency to avoid or control uncomfortable internal experiences such as difficult thoughts, feelings, memories, or physical sensations (Hayes, Strosahl, & Wilson, 2012). It may play a key role in the relationship between stress and negative psychological outcomes among teachers. When experientially avoidant, people focus on evading undesirable internal events instead of on attaining value-based goals. Karekla and Panayiotou (2011) found that those who reported higher EA reported greater use of coping strategies such as denial, emotional support, behavioral disengagement, venting, and self-blame. Those reporting lower EA reported greater utilization of positive reframing and acceptance.

In this study we examine whether teachers' EA moderates or mediates the relationship between their stress and the levels of burnout and depression. Other studies have found EA to mediate and moderate relationships between internal experiences and psychological and behavioral disorders among older adults (Andrew & Dulin, 2007), perfectionism and worry (Santanello & Gardner, 2007), and anxiety sensitivity and borderline personality disorder (Gratz, Tull, & Gunderson, 2008). Trauma survivors who report PTSD and low levels of EA reported greater personal growth and the belief that their lives had meaning (Kashdan & Kane, 2011). Two studies comparing experiential avoidance with coping and emotion regulation strategies found that EA fully or partially mediated the relationships between these strategies and anxiety-related distress (Kashdan, Barrios, Forsyth, & Steger, 2006). Similarly, EA acted as a mediating variable in the effect of passive coping on increased anxiety and depression and reduced emotional and psychological wellbeing (Fledderus, Bohlmeijer, & Pieterse, 2010). EA levels have also been shown to moderate relationships between sexual victimization and psychological symptoms; those with lower EA levels were less likely to develop symptoms (Merwin, Rosenthal, & Coffey, 2009).

Some have examined experiential avoidance in relation to burnout and workplace wellbeing. Among critical care nurses in Spain, EA was significantly and positively related to the depersonalization and emotional exhaustion subscales of the Maslach Burnout Inventory (Maslach et al., 1997) and significantly and negatively correlated with the personal accomplishment subscale (Iglesias, Vallejo, & Fuentes, 2010). Lower EA predicted positive outcomes in mental health, job satisfaction, and job performance one year later in a sample of English and Scottish customer service call center employees (Bond & Bunce, 2003). In a study of preschool teachers, significant associations were found between EA and depression, burnout, and stress (Biglan et al., 2013).

Yet to our knowledge, no one has investigated the possibility that EA mediates or moderates relationship between stress and burnout and depression among teachers. Evidence of such relationships would point to the value of strategies to help teachers become less experientially avoidant. Thus we examine whether EA is associated with psychological wellbeing and whether it mediates or moderates relationships between teacher stress in their relationships with students or colleagues and the level of their psychological wellbeing.

Measuring Experiential Avoidance among Teachers

The most widely used measure of EA is the *Acceptance and Action Questionnaire* (AAQ-II; Bond et al., 2011). It has been shown to predict a wide variety of psychological problems (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). However research suggests that instruments assessing avoidance relevant to specific aspects of functioning more ably predict behavioral and psychological problems (Gifford et al., 2004; Luoma, Drake, Hayes, & Kohlenberg, 2011). To study the relationships among EA, mental health, and stress in teachers we created a measure specific to teachers' EA.

Thus we (1) examine the psychometric properties of our measure of teacher EA; (2) investigate the relationships between EA and teachers' psychological wellbeing; (3) examine the moderating role of EA in relationships among stress associated with problematic student relations, low social support, and teachers' psychological wellbeing; and (4) investigate whether EA mediates the association between stressful student relations and psychological wellbeing. We also provide data on the prevalence of depression and burnout among Oregon teachers.

Methods

The data for this study come from the Teacher Wellbeing Project, a 3-year randomized controlled trial of a school-based intervention to increase teacher and staff wellbeing, reduce stress, increase collegial relations, and improve implementation of behavior support strategies. We focused on schools with grades six through eight. We chose middle school for three reasons: during early adolescence substance use, antisocial behavior, and depression escalate (Biglan, Brennan, Foster, & Holder, 2004); it has the highest levels of teasing and harassment (Gottfredson et al., 2000), processes that contribute to deviant peer group formation and problem behavior (Rusby, Forrester, Biglan, & Metzler, 2005); and it has more coercive behavior directed toward teachers than elementary or high schools do (Gottfredson et al., 2000). This study utilized baseline self-report data from teachers ($n = 529$) in Oregon middle and K-8 schools.

Participants and Procedures

We recruited 33 schools to the study: 3 in Year 1, 10 in Year 2, and 20 in Year 3. Initially we hoped to recruit only middle schools (grades 6–8 or 7–8), but as our initial recruitment was low, we expanded our sample to allow other configurations that included middle school grades, such as K-8, 1–8, and 7–12. Our sample does not include teaching assistants. Their participation varied widely from school to school and we wanted to have a sample that we could generalize to the population of teachers. Table 1 presents demographic characteristics of the 529 participants.

We paired schools based on (a) the number of students, (b) school grade configuration, and (c) the Rural-Urban Commuting Area (RUCA) index, on which they were required to be within one grade. The RUCA codes communities in terms not only of their rural vs. urban features, but also in terms of the degree to which they involve commuting. It gives a more fine-grained characterization of the community than is provided by county level, rural/urban

distinctions (<http://depts.washington.edu/uwruca/ruca-projects.php>). Schools were in urban (n=18), large rural (n=5), and small rural (n=6) communities. We randomly assigned pairs to receive the intervention immediately or with a 1-year delay. Teachers and other staff in both groups completed surveys annually for three years. We invited all teachers and staff to complete the assessments and attend acceptance-based workshops at the schools.

Using Qualtrics online survey software, we emailed consent forms and electronic surveys to participants, who each received \$25 for completing them. Schools with a return rate of 80% received an additional \$100. The subset of questionnaires focused specifically on school-related stressors, EA, and mental health symptoms at baseline.

Measures

Demographics—Participants provided data regarding gender, race/ethnicity, teaching role (general or special education), grade(s) taught, total years teaching, and hours worked per week.

Teacher psychological wellbeing—The *Patient Health Questionnaire-8* (Spitzer, Kroenke, & Williams, 1999) is an 8-item self-report to assess the severity of depression symptoms that occurred in the past two weeks. Items on a 4-point Likert-like scale range from 0 for “not at all” to 3 for “nearly every day” and ask about symptoms such as “having little interest or pleasure in doing things” and “feeling down, depressed, or hopeless.” Higher overall scores correspond to greater depression severity. There is solid evidence for its reliability ($r = .86-.89$) and criterion validity (Kroenke, Spitzer, & Williams, 2001). Cronbach’s alpha was .87.

The *Maslach Burnout Inventory –Educators Survey* (Maslach et al., 1997) is a 22-item teacher self-report, including subscales on (1) emotional exhaustion, (2) professional accomplishment, and (3) depersonalization. Each dimension is considered separately and not combined into one score. Items on a 7-point Likert-like scale have responses ranging from 0 for “never” to 6 for “every day.” An example is, “I feel emotionally drained from my work.” Higher scores on emotional exhaustion and depersonalization subscales correspond to higher levels of burnout, while higher scores on personal accomplishment correspond to lower levels of burnout. Considerable evidence supports the measure’s reliability and validity. Subscale internal consistency coefficients range from .71 to .90 (Maslach et al., 1997). Cronbach’s α was .90 for emotional exhaustion, .72 for depersonalization, and professional accomplishment, .79.

Teacher stress—Three measures examined aspects of teacher stress: The *Index of Teaching Stress-Part B* (Greene, Abidin, & Kmetz, 1997) assessed perceptions of challenging student behavior. The ITS is unique in focusing on how challenging student behavior affects teachers’ perceived support from other adults, loss of satisfaction from teaching, disruption of the teaching process, and frustration with parents. Its goal is to assess teachers’ perceptions of students’ effects on the teaching process, learning environment, and the teachers’ sense of efficacy and satisfaction. We used a 24-item version of Part B (teacher domain). Biglan et al. (2013) utilized data reduction techniques to develop this version and found that decreasing the number of items did not adversely affect reliability. Item responses

are on a 7-point Likert-like scale and range from 1 for “strongly disagree” to 6 for “strongly agree.” Items include “Problem behavior negatively affects my ability to enjoy my job,” and “Interacting with the parents of problematic students is frustrating.” Higher scores indicate a greater sense of hopelessness and ineffectiveness as a teacher. The 24-item version of the ITS previously demonstrated internal consistency coefficients from .87 to .93. Cronbach’s α was .93.

Staff Social Support (Undén, Orth-Gomér, & Elofsson, 1991) is a 5-item measure designed to assess perceptions of the work environment, group cohesion, and quality of staff relationships. Items originally on a 4-point scale were adjusted to a 6-point scale (1 for “not at all true” to 6 for “absolutely true”). Items include, “I am getting on well with my co-workers” and “There is good group cohesion at the workplace.” High scores indicate good support. This measure was intended for use across different types of organizations. It has demonstrated sufficient reliability ($\alpha = .78$; Griffith et al., 1999). Cronbach’s α was .84.

Experiential avoidance—The 10-item AAQ-II (Bond et al., 2011) assesses how much people feel the need for emotional and cognitive control, the tendency to avoid negative thoughts and emotions, and barriers to taking action when negative thoughts or emotions emerge. Items are on a 7-point scale with 1 for “never true” and 7 for “always true.” We re-coded AAQ-II items so that higher scores indicated greater overall EA. The AAQ-II had good internal consistency in this study (Cronbach’s $\alpha = .85$).

We based the *Teacher Acceptance & Action Questionnaire* (TAAQ) on the AAQ-II (Bond et al., 2011) using a pool of teaching-specific items (e.g., “It seems like most people are handling their lives better than I am” became “When I compare myself to other teachers, it seems like most of them are handling their classrooms better than I’m handling mine”). A panel of practitioners and researchers who were doing work on experiential avoidance reviewed a preliminary set of 30 items. Steven Hayes, a developer of the original AAQ, reviewed them; he advised adding 5 items (e.g., “I can stay focused on my role in helping students even when I feel down” and “My frustrations with teaching make it hard for me to do my job”). Items were rated on a 7-point Likert-type scale (1 for “never or very rarely true” and 7 for “very often or always true”). Higher scores indicated greater overall EA.

Results

Preliminary Analyses

Schafer and Graham (2002) informed our analysis of missing values and removal of outliers. Missing data rates ranged from 0.0 to 3.8% for study covariates, 1.1 to 5.7% for study predictors, 2.3 to 6.4% for outcomes, and 5.1% for teacher EA. Despite the low rates of missing data, we produced a fully imputed data set using maximum likelihood estimates. Imputation occurred after determining the final TAAQ items. We performed regression diagnostics and found model assumptions of normality and linearity plus model residual assumptions of normality, homoscedasticity, and independence of observations.

Psychometric Properties of the TAAQ

To assess TAAQ psychometrics and reduce the number of items, we generated a random half sample ($n=264$) and ran a principal components analysis. We retained a 1-factor solution with 10 items loading .60 or greater. Table 2 presents the factor loadings for these. Using the other random half ($n=265$), we used a confirmatory factor analysis to estimate a model with the 10 items loading on one common factor. The model was estimated using weighted least squares to account for the ordinal nature of the data. Results indicated good model fit ($CFI = .96$, $TLI = .95$, $WRMR = 0.972$). The TAAQ showed good inter-item reliability ($\alpha = .87$). It moderately correlated with the original AAQ-II ($r = .53$, $p < .01$).

Rate of Depression and Burnout among Teachers

Table 3 presents evidence of the percent of teachers showing significant depression or burnout levels. Using accepted cutting scores for the PHQ-8 (Spitzer et al., 1999), we found 26.8% mildly, 8.9% moderately, and 2.8% moderately severely or severely depressed. Levels of depression did not differ between genders, but significant differences were found among school types, with the highest levels found in large rural areas and the lowest in urban school settings.

With respect to emotional exhaustion, 24.4% reported moderate levels and 70.8% reported high levels; 34% of teachers reported moderate levels of depersonalization and 28.2% reported high levels. However, 94.4% reported high levels of personal accomplishment. We found no significant differences in burnout by gender, school setting, years teaching, or role.

Perceptions of Teaching Stressors

No significant differences were found in perceptions of stress related to student problem behavior between males and females, or by school setting. A significant difference did emerge between general and special education teachers, who reported significantly more stress related to student behavior ($t [527] = 4.28$, $p < .001$). Significant gender differences were found in perceptions of social support with males endorsing higher satisfaction with social support than females ($t [526] = 2.12$, $p < .034$). EA did not differ by gender or by school or teacher type.

EA as a Mediator of Relationships between Stress and Burnout and Depression

We begin by analyzing mediational relationships, as these involve the relationship between (a) stress measures and psychological wellbeing measures, (b) stress measures and EA, and (c) EA and psychological wellbeing measures. According to Baron and Kenny (1986), the criteria for mediation would require that stress measures are significantly associated with our two measures of psychological wellbeing, that EA is associated with stress and wellbeing, and that the relationship between stress and wellbeing diminishes when EA is included in the analysis.

We used hierarchical multiple regression to test the effect of the mediator variable (EA) on each dependent variable, with stressful student relations as the predictor (Figure 1). We used Baron and Kenny's four criteria of mediation, along with a test of the indirect effect using a bootstrap approach (Preacher & Hayes, 2008) to test the models. MacKinnon et al. (2002)

recommend using a bootstrap approach over the Sobel test because they found bootstrapping demonstrated higher power while preserving reasonable control over the Type I error rate.

Before examining relationships between study predictors and outcomes, we looked at possible covariates that might be controlled for in examining these relationships: gender, school setting, years teaching, and teaching role (i.e., general or special education). We found depression significantly related to school setting and included it as a covariate for subsequent analyses involving depression. Given the number of tests performed, a Benjamin-Hochberg false discovery rate correction was made to protect against Type-I error rates.

Table 4 presents mediation analyses results. Teacher reports of student problem behavior were significantly related to depression, emotional exhaustion, depersonalization, and personal accomplishment. EA was also significantly greater among teachers who reported higher levels of student problem behavior and was significantly and moderately related to depression, emotional exhaustion, depersonalization, and personal accomplishment. Finally, as Table 4 shows, by including EA in the mediation models for each wellbeing measure, the amount of variance that problem behavior accounts for in the measures diminishes significantly. The reductions ranged from 46% for personal accomplishment to 94% for depression.

We also conducted a mediation analysis for the impact of social support on psychological wellbeing. Although teacher reports of collegial social support were significantly related to psychological wellbeing measures, we found no evidence that EA mediated these relationships.

EA as a Moderator of Relationships between Stressors and Wellbeing

We performed hierarchical multiple regression models to test the hypothesis that EA influences the strength of the relationship between stress and the outcome variables. Moderation would be indicated by a significant interaction effect in which the direction or strength of the relationship between a stress and an outcome variable differed significantly as a function of EA (Aiken & West, 1991). The interaction effect in a moderated regression model is estimated by including a cross-product term as an additional exogenous variable. A subsequent hierarchical, incremental *F* test is implemented to ascertain whether the interaction term adds more to the relationship than what we observed with the predictors alone.

For each hypothesized main effect model (between each predictor variable and the wellbeing variables), teacher EA was added to each main effects model, along with the interaction term with each study predictor. Because we tested 15 interaction models, a Benjamini-Hochberg false discovery rate (Thissen, Steinberg, & Kuang, 2002) correction was made to the *p* values to protect against Type-I error rates. We found no evidence that EA moderated the relationships between stressors and measures of psychological wellbeing.

Discussion

The results support the view that experiential avoidance plays a role in teachers' psychological wellbeing. EA, as measured by the TAAQ, was significantly positively associated with depression, emotional exhaustion, and depersonalization, and significantly negatively associated with personal accomplishment. Also, teacher EA seems to function as a mediator in the relationship between stress associated with student problem behavior and each measure of teachers' psychological wellbeing.

The Extent of Depression and Burnout

Given the paucity of evidence regarding depression and burnout among teachers, it seems useful to examine the rates of these problems in the relatively large sample of teachers. Although this was not a representative sample, we did not choose it based on criteria or procedures that would be expected to recruit a disproportionate number of teachers with these problems. Thus the study does provide some information about the rate of depression and burnout among teachers in middle schools and, to a lesser extent, elementary schools.

Seventy-one percent reported high levels of emotional exhaustion and 28% depersonalization, but 94% had strong feelings of personal accomplishment. The levels of burnout and depression among teachers suggest that it is important to take action to protect the wellbeing of teachers and students. It is worth noting that more than 10% of the sample reported a level of depression that would lead to a recommendation for treatment (Kroenke & Spitzer, 2002). In light of the studies linking depression to reduced teaching effectiveness, and the negative effects depression has on teacher wellbeing, these findings point to the need for prevention (Jeffcoat & Hayes, 2012) and treatment of depression for teachers.

We do not know why there are higher rates of depression in larger rural areas than in urban settings, but the finding bears further research to see if it is replicable.

Differences between Groups in Teaching Stressors

It is notable that special education teachers reported significantly more stress related to challenging student behavior. These differences may be due to the fact that students with emotional and behavioral difficulties in special education present more behavioral challenges (Kokkinos & Davazoglou, 2009). Unfortunately, without adequate support, this type of stress can lead to special education teachers leaving the field (Lawrenson & McKinnon, 1982). Moreover, frequent and intense stress among these teachers leads to reduced sensitivity to student needs, lower rates of positive interaction, increased likelihood that teachers will engage in aversive methods of classroom discipline and diminished teaching effectiveness (Wisniewski & Gargiulo, 1997).

The Relationships between Stressors and Teachers' Psychological Wellbeing

This study replicated other studies of the role of problematic student behavior and lack of collegial support as stressors that contribute to teachers' burnout and depression. All correlations between stress measures and wellbeing measures were small to moderate in

size. In general, reports of student problem behavior were more highly related to burnout and depression than were reports of lack of collegial support.

Reliability and Validity of the Teacher Acceptance and Action Questionnaire (TAAQ)

The TAAQ assessed avoidance reactions specific to teaching. It demonstrated good inter-item reliability and demonstrated a significant correlation with the AAQ ($r = .53$). Most importantly it was moderately correlated with all measures of psychological wellbeing.

The Role of Experiential Avoidance in Teacher Wellbeing

Our teacher EA measure significantly and moderately related to all measures of psychological wellbeing, with r values ranging from .45 to .56. Moreover, mediation analyses concurred with the theory that EA mediates the impact of the stress from difficult students on burnout and depression. These results agree with a large number of studies indicating that EA is a psychological process that plays a key role in how well people cope with a wide variety of stressors (Andrew & Dulin, 2007; Fledderus et al., 2010; Gratz et al., 2008; Kashdan et al., 2006; Kashdan & Kane, 2011; Merwin et al., 2009; Santanello & Gardner, 2007).

Study Limitations

An obvious limitation of our analyses is that they are not longitudinal. We cannot be sure that the relationships reflect the stress of having difficult students causing people to become experientially avoidant and then become burned out and depressed. Yet the results do concur with three types of studies that provide some support for our interpretation of these results. First, longitudinal studies show that EA predicts varied measures of psychological functioning (Biglan, Hayes, & Pistorello, 2008). Second, some longitudinal studies show that EA mediates relationships between exposure to stress and subsequent psychological distress (e.g., Marx & Sloan, 2005). Lastly, ample evidence indicates that interventions focused on reducing EA work and that reductions in EA mediate the effects of these interventions on diverse outcomes (Gifford et al., 2004; Levin et al., 2012; Zettle, Rains, & Hayes, 2011).

An additional limitation is the fact that our primary stress measure assessed teacher perceptions of how student behavior impacts the teaching process, learning environment, and teacher wellbeing. The correlation of this measure with measures of psychological wellbeing may be, in part, a function of the teachers' perceptions more than actual problem behavior. Another limitation of the study is that the sample consisted primarily of Caucasian teachers from Oregon. Generalizability of the findings may be limited.

Implications of these Findings for the Wellbeing of Teachers and Students

There is growing support for using acceptance- and mindfulness-based professional development programs to help teachers address job stress and burnout (Biglan et al., 2013; Jeffcoat & Hayes, 2012). The evidence is consistent with studies showing the value of mindfulness-based interventions, such as Acceptance and Commitment Therapy/Training (ACT), in other organizational settings (Bond & Bunce, 2000; 2003) as well as research demonstrating ACT's effectiveness with a diverse range of clinical conditions, including

anxiety and depression (Bohlmeijer, Fledderus, Rokx, & Pieterse, 2011; Hayes, Bach, & Boyd, 2010; Hayes, Boyd, & Sewell, 2011; Zettle, 2003; Zettle et al., 2011).

The evidence points to the utility of implementing interventions aimed at decreasing EA in teachers. Avoidance of difficult internal experiences has been shown to maintain or even intensify psychological distress (Hayes et al., 1996). EA is a facet of psychopathology that can be mitigated by acceptance and mindfulness, two practices that are marked by open and non-judgmental approaches to internal and external experiences. By helping teachers learn how notice and accept difficult internal and external experiences (instead of judging, fighting, and/or suppressing them), it is possible they, in turn, will have more energy and resources to devote to teaching and building positive relationships with students and colleagues. By practicing acceptance and mindfulness, teachers may also become less reactive to difficult internal and external experiences, subsequently diminishing the detrimental effects of stress.

At the same time, our results regarding the level of depression and burnout in teachers underscore the stressfulness that is frequently experienced by teachers and the value of measures that could reduce the level of stress to which teachers are exposed. For example, programs such as the Good Behavior Game (Kellam et al., 2008) could reduce teachers' stress by reducing the rate of student's disruptive behavior. Moreover, we note that the study was conducted during a period when financial support for schools was declining in Oregon. Stronger social support from administrators, parents, and the community as well as more financial support for teachers could buffer them from the effects of stressful interactions with students.

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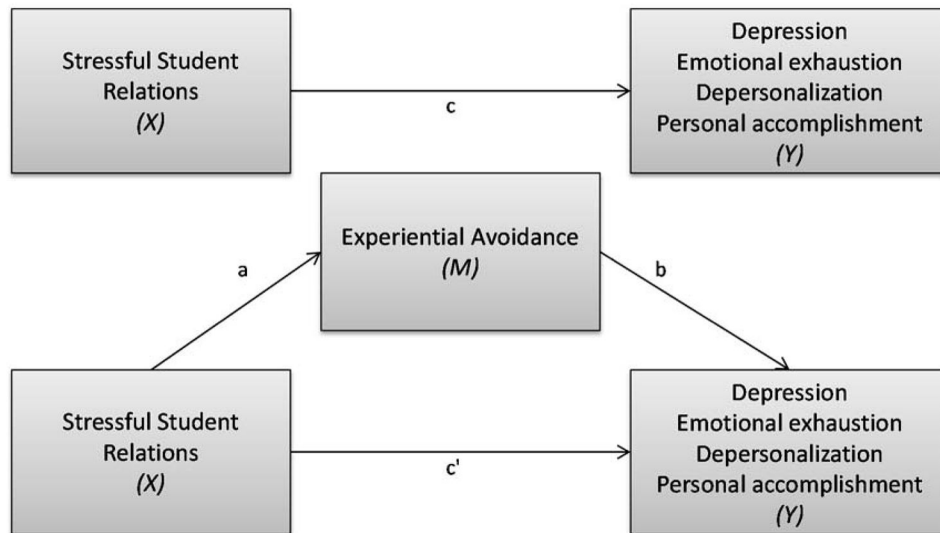


Figure 1. Illustration of hypothesized mediation model Student Problem Behavior (X) and mental health outcomes (Y), with Experiential Avoidance as the mediator variable (M). X is hypothesized to exert an indirect effect on Y through M

Table 1

Demographic information

	<i>n</i>	%
Gender		
Female	360	68.1
Male	168	31.8
Did not respond	1	0.2
Race		
American Indian or Alaskan Native	5	0.9
Asian	11	2.1
Black or African American	6	1.1
White	463	87.5
Biracial / multiethnic	16	3.0
Other	18	3.4
Did not respond	10	1.9
Hispanic or Latino	27	5.1
Teaching classification		
General education	449	84.9
Special education	80	15.1
Grade taught ¹		
Fifth grade or lower	234	44.2
Sixth grade	156	29.5
Seventh grade	257	48.6
Eighth grade	307	58.0
Ninth grade or higher	23	4.4
Years teaching		
< 1 year	59	11.2
1–3 years	49	9.3
4–5 years	29	5.5
6–10 years	103	19.5
11–15 years	83	15.7
> 15 years	186	35.2
Did not respond	20	3.8
Hours worked per week		
40 hours or less	128	23.9
41 hours or more	400	75.9
Did not respond	1	0.2

¹ Multiple response item; grade response percentages are based on total sample (n=529)

Table 2

Teacher Acceptance & Action Questionnaire: 10 items kept in the exploratory factor analysis

Item	Item content	Factor loadings
Q1.35	After a difficult interaction at school, I have a hard time turning my attention back to my teaching responsibilities	.71526
Q1.01	My worries about doing a good job keep me from working effectively.	.64477
Q1.10	My frustrations with teaching make it hard for me to do my job.	.64050
Q1.04	When I'm feeling down at work, I have trouble engaging with others.	.63423
Q1.32	I can't work effectively when administrators do things to upset me.	.62750
Q1.24	I can stay focused on my role in helping students even when I feel down.	-.62705
Q1.33	When I am distressed by my co-workers I find it hard to do my job.	.62287
Q1.34	I find myself being distracted at school by my worries.	.62148
Q1.16	I sometimes feel very distracted by my negative thoughts about students.	.62127
Q1.03	When I feel frustrated at work, I wonder why I ever went into teaching in the first place.	.61793

Table 3
Teacher EA as mediator of relationships between student problem behavior on study outcomes

Baron & Kenny's four criteria for mediation	B	SE	t-ratio	p	r
Effect of predictor on outcome					
Student problem behavior → depression	0.15	0.02	7.16	.013	.31
Student problem behavior → burnout – EE	0.48	0.04	10.84	.001	.43
Student problem behavior → burnout – DEP	0.50	0.04	13.02	<.001	.50
Student problem behavior → burnout – PA	-0.31	0.03	-11.77	.002	.46
Effect of predictor on mediator					
Student problem behavior → EA	-0.47	0.03	-17.39	<.001	.61
Effect of mediator on outcome					
EA → depression	0.30	0.03	12.35	<.001	.48
EA → burnout – EE	0.80	0.05	15.09	<.001	.55
EA → burnout – DEP	0.63	0.05	12.72	<.001	.49
EA → burnout – PA	-0.40	0.03	-11.91	<.001	.46
Effect of predictor on outcome controlling for mediator					
Student problem behavior → depression EA	0.01	0.02	0.35	.126	.02
Student problem behavior → burnout – EE EA	0.17	0.05	3.27	.002	.14
Student problem behavior → burnout – DEP EA	0.32	0.05	6.86	<.001	.29
Student problem behavior → burnout – PA EA	-0.19	0.03	-5.95	<.001	.25

Notes. B = beta coefficient; SE = standard error; pr = partial regression coefficient; | = controlling for; EE = emotional exhaustion, DEP = depersonalization, PA = personal accomplishment, EA = experiential avoidance

Table 4Bias corrected bootstrap results for indirect effects and percent change in effect sizes (r)

	95% CI		% Decrease in r
	Lower	Upper	
Student problem behavior \rightarrow depression EA	.109	.178	93.5
Student problem behavior \rightarrow burnout – EE EA	.246	.387	67.4
Student problem behavior \rightarrow burnout – DEP EA	–.165	–.075	42.0
Student problem behavior \rightarrow burnout – PA EA	–.163	–.079	45.7

Notes. B = beta coefficient; SE = standard error; pr = partial regression coefficient; | = controlling for; EE = emotional exhaustion, DEP = depersonalization, PA = personal accomplishment, EA = experiential avoidance