Thought Question: If teacher preparation programs are not requiring courses on teacher well-being, how do teachers get this information?

Research Article: ***Promoting Secondary Teachers' Well-Being and Intentions to Implement Evidence-based Practices: Randomized Evaluation of the Achiever Resilience Curriculum.***

Subject Area: Teacher Well-being

Authors: Cook et al
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Abstract
This study solicited teacher volunteers to test the *ACHIEVER Resilience Curriculum* developed to promote teacher well-being. The program integrated "mindfulness, values clarification, gratitude practices, and sleep hygiene" in a pre/post test model to determine the impact on a teacher's well-being. Teachers who participated in the program experienced "reduction in job-related stress, improvements in teacher efficacy, and stronger intentions to implement evidence-based practices." At the time of the study, there were no teacher preparation programs to prepare teachers on the art of teacher well-being. An implication of the study suggests schools create "infrastructures" to address teacher well-being and mindfulness training.

Keywords: Teacher well-being; Teacher stress; Mindfulness; Evidenced-based practices

Enjoy the article! **And remember…** Schools can serve as a catalyst in supporting teacher well-being.

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PROMOTING SECONDARY TEACHERS' WELL-BEING AND INTENTIONS TO IMPLEMENT EVIDENCE-BASED PRACTICES: RANDOMIZED EVALUATION OF THE ACHIEVER RESILIENCE CURRICULUM

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Teaching is regarded as one of the most challenging yet rewarding professions. Moreover, research has shown that stress and burnout are likely to undermine teacher effectiveness and negatively impact their willingness and intentions to implement evidence-based practices. The present study sought to contribute to a growing body of research implicating the importance of teacher well-being by evaluating the efficacy of a theoretically based training that integrates several practices into a single program (e.g., mindfulness, values clarification, gratitude practices, sleep hygiene, etc.) that are designed to promote the well-being of teachers—the ACHIEVER Resilience Curriculum (ARC). To evaluate the ARC, a randomized block controlled study was conducted with pre–post measurement. Results from the study indicated that, compared with an active control group, teachers who participated in the ARC experienced significantly better outcomes, characterized by medium effect sizes, including reductions in job-related stress, improvements in teaching self-efficacy, and stronger intentions to implement evidence-based classroom practices. The implications of these findings for teacher preparation and professional development, along with the limitations of the study, are discussed. © 2016 Wiley Periodicals, Inc.

Teaching is regarded as one of the most challenging yet rewarding professions, consistently ranking as one of the most stressful occupations according to nationwide studies (Jarvis, 2002). Teacher burnout and exhaustion are chronic issues that afflict the teaching profession, resulting in negative student outcomes (Clunies-Ross, Little, & Kienhuis, 2008; Grayson & Alvarez, 2008). By compromising teacher well-being, burnout can undermine the quality of teachers' performance and negatively impact their interactions with students (Gerber, Whitebook, &Weinstein, 2007; Yoon, 2008). More specifically, research has shown that teachers who experience significant job-related stress are likely to exhibit social, emotional, and behavioral problems that interfere with their effectiveness in the classroom (Evans, 2003; Kyriacou, 2001). In addition, data collected over several decades have revealed that teacher attrition occurs at an alarming rate, with 40% to 50% of new teachers leaving the field within their first 5 years, costing up to $2.2 billion annually (Alliance for Excellent Education, 2014). In addition, for decades, data have demonstrated that teachers leave the field at a concerning rate, whereas many who stay in the profession are disengaged and have diminished levels of resilience (Gu & Day, 2013; Jackson, Schwab, & Schuler, 1986; Leiter & Maslach, 2004; Miller, Brownell, & Smith, 1999).

To complicate matters even further, teachers today are responsible for educating an increasingly diverse population of students, many of whom are academically underprepared and present unique social, emotional, and behavioral challenges (Benson, Scales, Leffert, & Roehlkepartain, 2011; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Hoagwood & Erwin, 1997). Moreover, there has been a growing emphasis among policy-makers and scholars alike on holding teachers more accountable for student outcomes (Shahjahan, 2011). This emphasis has triggered both research

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and policy that calls for the identification, dissemination, and implementation of evidence-based practices (EBPs), and has resulted in more ambitious standards for student performance with an increased emphasis on teacher evaluation (Individuals with Disabilities Education Improvement Act, 2004; Konstantopoulos, 2014; No Child Left Behind Act, 2001; Spencer, Detrich, & Slocum, 2012). Although these changes are laudable on many accounts, they have escalated the amount of pressure and administrative burden placed on teachers, further compounding the stress and challenges associated with the teaching profession (Fleming, Mackrain, & LeBuffe, 2013; Sheridan, Edwards, Marvin, & Knoche, 2009).

Teachers Well-being and Implementation of EBPs

Notwithstanding the commendable focus on improving the adoption and use of EBPs in schools, initial implementation and sustainment of any program or practice with fidelity requires a willing, committed and stable workforce (Glisson et al., 2008; Manlove & Guzell, 1997). Despite a growing list of school-based EBPs coupled with recommendations to improve the deployment of these practices in school settings (Forman et al., 2013), there has been a failure to recognize the critical role that teacher stress and social-emotional well-being plays in this process. Although many current initiatives and policies set high standards for teachers' implementation of EBPs, few show concern for teachers' social-emotional well-being or address how it affects their willingness and ability to deliver EBPs. Within teacher preparation programs, there is a lack of emphasis on promoting teacher well-being, and few programs have been developed to specifically address this critical issue. Not only is this focus essential as a retention strategy designed to retain highly skilled teachers in the profession, but it can also enable teachers to model and promote the resilience they wish to see in their students (Jennings & Greenberg, 2009). Unsurprisingly, high levels of teacher stress and low social-emotional well-being have been linked to unsuccessful behavior change efforts and inadequate fidelity of implementation (Darling-Hammond, 2001; Goleman & Guo, 1998; Howard & Johnson, 2004; Jorde-Bloom, 1986; Montgomery & Rupp, 2005). As a result, understanding the factors that undermine teacher well-being and willingness to implement innovative practices should be a top priority.

Correlates and Causes of Teacher Stress and Burnout

A large body of research has emerged indicating factors associated with teacher stress and burnout. Such factors include low self-efficacy, job dissatisfaction, lack of administrative support, and overall negative school climate, as well as attrition, negative teacher–student interactions, and limited fidelity of implementation (e.g., Gu & Day, 2013; Kyriacou, 2001; Miller et al., 1999; Montgomery & Rupp, 2005). Moreover, when compared with the general population, teachers are at greater risk of experiencing psychological burnout (Evans, 2003), depression (Jurado, Gurpegui, Moreno, & de Dios Luna, 1998), physical health problems (Bobek, 2002), and job dissatisfaction, all of which can be precipitating factors for leaving the profession. Jennings and Greenberg (2009) explain this array of deleterious outcomes using a "burnout cascade" model, which suggests that job-related stress and burnout compound as teachers encounter increasingly challenging student behaviors that they are incapable of managing. As a result of this situation, teachers resort to using more reactive and punitive classroom management strategies over time, which worsens the classroom climate and increases the likelihood of student problem behavior (Mayer, 1995; Mitchell & Bradshaw, 2013). Although the correlates of teacher stress and potential causal theories are well documented, few studies have investigated the effects of interventions designed to support teachers in learning skills and establishing routines that help them manage job-related stress and promote their well-being.

Promoting Teacher Well-Being and Resilience

There has been a recent surge in conceptual and empirical work highlighting the relationship between teachers' own well-being and resilience and student outcomes (Biglan, Layton, Jones, Hankins, & Rusby, 2011; Flook, Goldberg, Pinger, Bonus, & Davidson, 2013), and findings from this line of research may have important implications for teacher professional development. For example, Jennings (2011) argued that teachers need direct instruction in social–emotional competencies themselves to learn how to effectively develop positive relationships with students and to "manage their classrooms effectively and successfully implement social–emotional learning with children" (p. 135). Moreover, Renshaw, Long, and Cook (2015), who recently developed and validated the Teacher Subjective Wellbeing Questionnaire, noted that teacher well-being has, historically, been conceptualized negatively (i.e., as stress and burnout) and have called for a reconceptualization that seeks to both improve positive indicators of teacher functioning (e.g., teaching self-efficacy and perceptions of school connectedness) while mitigating the well-known threats to well-being (i.e., stress and burnout). Taken together, then, these calls suggest that professional development efforts targeting teacher well-being should aim for more than simply reducing stress and burnout—they should also strive to cultivate positive patterns of thinking and feeling.

Within the last decade, research has begun focusing on evaluating the impact of well-being–promoting interventions for teachers that balance these dual aims: reducing threat-to-well-being indicators while increasing presence-of-well-being indicators. Most of the extant studies incorporate mindfulness-based practices to increase teachers' self-regulatory skills by increasing their intentional focus on the present moment, and nonjudgmental observation of experiences, with the ultimate goal of promoting greater levels of health, well-being, and professional effectiveness. For example, Singh, Lancioni, Winton, Karazsia, & Singh (2013) investigated the impact of mindfulness training for teachers, which improved their ability to manage stress and notice and respond to student behaviors to produce positive changes in young children's behavior. Furthermore, Frank, Reibel, Broderick, Cantrell, and Metz (2013) studied the effectiveness of mindfulness-based stress reduction training for teachers, with results indicating improvements in teachers' self-regulation, self-compassion, and sleep quality. Moreover, Biglan and colleagues (2011) demonstrated that a training grounded in acceptance and commitment therapy (ACT) resulted in reductions in teachers' experiential avoidance and increases in their mindful awareness, valued living, and self-efficacy. Collectively, these studies represent a sample of contemporary work that has evaluated the effects of targeted well-being–promoting interventions for teachers. Although all of these studies point to the promise of such interventions for teachers, it is noteworthy that each approached intervention from a particular theoretical perspective that manifested in similarities and differences from the others. Considering the diversity of practices that teachers could adopt and implement to promote their well-being, the purpose of the present study was to develop and test an integrative approach to intervening with teacher well-being that combines theoretically different practices into a coordinated intervention system: the ACHIEVER Resilience Curriculum (ARC).

Purpose of the Study

The purpose of this study was to add to the growing research base of interventions for reducing stress and promoting well-being by evaluating the efficacy of a novel treatment package for teachers—the ARC. Primary aims included examining the impact of the ARC on indicators of teachers' well-being, as well as their perceptions regarding the acceptability, reasonableness, and effectiveness of the ARC. Moreover, a secondary aim of this study was to examine whether teachers' intentions to implement EBPs improved as a function of receiving the ARC. Consistent with a widely established theory of behavior change (theory of planned behavior [TPB]; Ajzen,

1985), this study examined teachers' intentions to implement EBPs, considering that research has consistently found that intention to act is one of the strongest predictors of actual behavior (Armitage & Conner, 2001). The ARC includes a total of eight resilience practices that have been independently linked to improved psychological and/or physical well-being, with two of them being emphasized as facilitative practices that enhance the use of the other well-being–promoting practices: (1) values clarification and (2) commitment and mindfulness-based practices. The present study was guided by five research questions:

1. To what extent does the ARC reduce job-related stress for teachers in the treatment group versus the control group?
2. To what extent does the ARC improve teacher self-efficacy for the treatment group relative to the control group?
3. To what extent does the ARC improve teachers' intentions to implement EBPs for the treatment group relative to the control group?
4. To what extent does the ARC improve job satisfaction for teachers in the treatment group compared with the control group?
5. To what extent do teachers in the treatment group perceive the ARC to be acceptable, feasible, and effective?

Methods

Participants

The participants included in this study were 44 secondary teachers from a single educational service district in the Midwest region of the United States. The school district served a relatively large catchment area and had a total of 645 certified staff and 8,142 students in Grades prekindergarten through 12. With regard to student ethnicity, 78% were Caucasian, 12% were Hispanic, and 10% were other. Furthermore, 68% of students were eligible for free and reduced-priced meals.

A flyer was distributed by central administrative staff to secondary teachers within the school district. The flyer offered access to free web-based training for those staff interested in learning skills to effectively manage job-related stress and enhancing overall well-being. In total, 54 teachers responded to the flyer and indicated interest in participating in the training. To incentivize teachers to participate, they received continuing education hours for their participation. Of the 54 interested teachers, 44 provided informed consent and agreed to participate in the data collection process. The other 10 teachers were allowed to participate but did not complete the pre- and post-intervention measures because they denied involvement in the data collection part of the study. Of the participating teachers, 32 were high school teachers and 12 were middle school teachers. The average years of teaching experience was 11.8 ($SD = 4.2$), and a quarter of participating teachers had obtained a master's degree ($n = 11$). With regard to self-reported ethnicity, 40 teachers indicated Caucasian as their ethnicity, 2 indicated Asian American, 1 indicated African American, and 1 indicated Hispanic/Latino.

Procedure

A randomized block controlled design with pre–post data collection was used to conduct an experimental investigation of the ARC. The first step involved creating 22 pairs of teachers based on comparable pre-scores on the teacher stress measure. Next, within each pair, teachers were randomly assigned to either the ARC condition or an attention-control (AC) condition, with the opportunity for delayed treatment for those in the AC condition. Preliminary analyses indicated that the two experimental groups did not differ significantly on demographic variables (Degree $\chi^2 = .47$;

$p = .51$; Teaching $t[1] = –.58$, $p = .56$) or the majority of baseline outcomes (Stress: $t[1] = -.40$, $p = .70$; Self-efficacy: $t[1] = .26$, $p = .80$; Intentions to Implement: $t[1] = .09$, $p = .93$). The only significant baseline difference between the two groups was noted for the job satisfaction measure, $t(1) = 2.07$, $p = .02$. To control for potential placebo effects resulting from increased attention to teachers, the AC condition involved all the teachers meeting together as a professional learning community to discuss classroom instructional and management practices for struggling students. They met on the same number of occasions ($n = 5$) for approximately the same period of time (10 hours) as the participants in the treatment group. Teachers in both conditions received continuing education hours for their after-school participation in these activities.

The treatment group involved five 2.5-hour ARC sessions implemented by the first author in collaboration with a doctoral-level school psychologist from the participating school district. The ARC was administered over the course of 5 weeks using the Adobe Connect web conferencing system, with all participants meeting together at the same location. The Adobe Connect system allowed participants to simultaneously see a video, access a PowerPoint presentation, and view any other supplemental documents utilized by the presenter (first author of this article). Also, the system enabled interactive experiences for the participants through the use of polls and the question-and-answer capabilities. The PowerPoint and supplemental materials were printed and provided to each of the participants prior to each session, which was facilitated by a central administrator. The participants in both groups were required to gather in one of two locations every Thursday evening for 5 weeks. Participants in the treatment group were asked to bring their own laptop computer to log in to the Adobe Connect system, which was used to track participant attendance across sessions. Sessions were organized according to the *Know, See, Do*, and *Improve* method, which was modeled after a direct instruction approach (Joyce, Weil, & Calhoun, 2004), developed by the National Center of Quality Teaching and Learning for delivering high-quality professional development. All sessions began with the *Know* section, which emphasized developing the knowledge and understanding of the resilience skill, habit, or routine. The *See* part of each session consisted of modeling or showing a video demonstration of particular skills, habits, and routines in action. Each of the didactic sessions ended with participants developing a personalized action plan outlining how they intended to apply the skill, habit, or routine in their work and life. Beyond the didactic session, the *Do* part focused on getting participants to try out and apply the resilience skill over the course of the week. To facilitate this, each participant identified a practice partner to whom the participants would teach the skill and who would hold the participants accountable to try out the resilience skill. The use of a practice partner was predicated on the "saying is believing" principle (Higgins & Rholes, 1978) and served as an accountability measure to increase the likelihood that participants would try out and apply the skill beyond the session. All subsequent sessions began with an *Improve* warm-up activity that consisted of having participants reflect, share out, and discuss how they intended to improve their use of the resilience practice presented in the previous session. Moreover, to prompt and remind each of the members of the treatment group to reflect on and apply the resiliency practices, they received three e-mails per week (Wednesday, Friday, and Saturday) that included the resilience practice area of the week (e.g., mindfulness-based practices to integrate into their school and life schedules) and reminders to integrate and use the previously learned practices.

The AC condition was designed to be structurally similar to the ARC condition in that participating teachers met on the same number of occasions, received attention from central administrators, and were embedded within a group that could provide a source of social support. A structured professional learning community (PLC) format was used to bring up and discuss topics related to instructional and classroom management challenges. Specifically, each meeting was organized around the following four questions: (a) What do we want to improve?; (b) What is the priority for the group?; (c) How will this affect my classroom practice?; (d) Does this align with district/school goals?; and (e) What's the

plan to achieve our goal? Unlike the ARC condition, the AC condition did not receive weekly e-mail reminders.

Pre-intervention data were collected prior to the first session and post-intervention data were collected 1 week after the final session for teachers in both conditions. An online secured data collection system was utilized to collect the data. Teachers in both groups were sent reminder e-mails prompting them to complete the post-intervention measures. Teachers who completed the pre- and post-intervention measures were included in a raffle to earn one of three $50 gift certificates.

Intervention

The ARC. The ARC was developed as a well-being–promoting intervention designed to train teachers in specific skills, habits, and routines (hereafter referred to as resilience practices) that enable them to become resilient educators. It is grounded in a logic model that positions teacher resilience and well-being as a requisite to attaining career longevity and, more importantly, to creating nurturing environments and implementing effective practices that are linked to positive student social, emotional, and academic outcomes (Jennings & Greenwood, 2009). Resilient teachers are able to optimize their relationships with students and their parents, are more open and willing to incorporate EBPs into the classroom, and establish and maintain a more positive classroom climate (Jennings & Greenberg, 2009). Consequently, these elements represent core mechanisms of change that lead to positive child outcomes.

These ARC practice areas were predicated on three main theories of change: (1) positive psychology, (2) cognitive behavior therapy, and (3) ACT. Positive psychology is a branch of psychology that focuses on how to make seemingly normal life more meaningful, satisfying, and fulfilling (Csikszentmihaly, Rathnude, & Whalen, 1993; Masten & Reed, 2002; Peterson & Seligman, 2004). Positive psychology focuses on cultivating individuals' strengths, desirable cognitions and emotions, and healthy relationships by teaching skills, establishing routines, and promoting positive institutions (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). There is a growing body of evidence supporting positive psychological practices to enhance subjective well-being (Seligman, 2002; Sin & Lyubomirsky, 2009). Cognitive behavior therapy (CBT) is a therapeutic approach that addresses the interconnection among thoughts, feelings, and behavior (i.e., the cognitive triangle). Multiple studies evaluating the efficacy of CBT interventions have demonstrated that it has common elements (e.g., cognitive restructuring, emotion regulation skills, problem solving) that help people regulate their emotions and develop more helpful ways of thinking about their current circumstances (Barrett, 1998; Kazdin & Weisz, 2003). Lastly, there has been a rise in research supporting ACT to improve the well-being and success of people who experience a variety of life stressors (Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Ost, 2008). The aim of ACT is to enable people to become more psychologically flexible toward life and strive to behave in a way that is consistent with their values (i.e., values-directed behavior). All three of these theoretical frameworks—positive psychology, CBT, and ACT—were used to inform the selection and development of the eight ARC practice areas.

ARC Practice Areas. The practice areas included in the ARC were purposefully selected to benefit teachers who are motivated to reduce their stress and burnout, enhance their subjective well-being, or a combination of the two. In total, ARC includes eight standalone practice areas that focus on helping teachers learn skills and routines they can integrate within their professional and private lives to enhance their resilience. ACHIEVER is an acronym that captures each practice area: (1) *A*wareness and empowerment through mindfulness-based practices; (2) *C*hoosing to pay attention to the positive and practicing gratitude; (3) *H*elping and doing good deeds for others; (4) *I*dentifying unhelpful thoughts and altering them to be more helpful; (5) *E*ngage in good sleep, exercise regularly, and eat well; (6) *V*alues clarification and commitment; (7) *E*stablishing good social

support, role model(s), and a mentor (relationships); and (8) *R*ewarding yourself through relaxation and recreation. Although the eight practice areas could be adopted and used in a standalone fashion, they were integrated together to produce a synergistic effect in that the more practice areas a teacher uses, the greater the benefits the teacher will likely experience.

The ARC begins by first training teachers in two meta-practices that are intended to provide the foundation for well-being and facilitate the use of other practices: (1) values clarification and commitment, and (2) awareness and empowerment through mindfulness-based practices. ARC begins by having teachers clarify and make commitments to their values as educators to provide motivation for acting in the service of such values despite the stressful or challenging situations that arise in the context of work (Simon, Howe, & Kirschenbaum, 1978). The values serve as a compass or guide that informs the selection of subsequent practices and provides the basis for enhancing teachers' sense of meaning and purpose about the profession. Following values clarification and commitment, teachers are trained in specific mindfulness-based practices (e.g., Mindful STOP, mindful breathing, mindful commute, and mindful breaks with students) that are designed to empower them to notice and accept—rather than attempt to control or avoid—their internal and external experiences, particularly the aversive ones, as they approach and engage in their professional duties (Hayes, Stroshal, & Wilson, 2011). These two meta-practices were referenced throughout subsequent training sessions and in reference to using other ACHIEVER practices. It is important to note, however, that a key feature of the ARC is to encourage participants to exercise choice by selecting and trying out whatever practices they felt comfortable with and that they perceived to be personally relevant and beneficial.

Measures

Perceived Stress Scale. A modified version of the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) was used to evaluate teachers' perceptions of stressful experiences in their work with students and life in general. Items were modified according to their wording to reflect experiences related to their work in schools. Items include a 5-point scale that ranges from 0 (*never*) to 4 (*very often*). The PSS includes 10 items that measure different aspects of perceived stress and has been shown to be a reliable and valid measure of life stress. The internal consistency estimate obtained in the present study ($\alpha = .82$) indicated that the PSS possessed adequate reliability.

Teacher Self-Efficacy Scale. A modified version of the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995), called the Teacher Self-Efficacy Scale (TSES), has been demonstrated to be a reliable and valid measure of teacher self-efficacy (Schwarzer, Schmitz, & Daytner, 1999). This scale was used to assess providers' confidence and self-efficacy related to their ability to work effectively with children. Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1986, 1993, 1997). Items include a 4-point scale that ranges from 0 (*not at all true*) to 4 (*very true*). The internal consistency estimate obtained in the present study ($\alpha = .79$) indicated that the TSES possessed adequate reliability.

The Satisfaction with Work Scales. The Satisfaction with Life Scale is a measure of the extent to which a person is satisfied with his or her life as a whole (Diener, Emmons, Larsen, & Griffin, 1985). This instrument has been modified and validated by researchers to measure work satisfaction specifically and is known as the Satisfaction with Work Scale (SWWS; Blais, Lachance, Forget, Richer, & Dulude, 1991). The SWWS is a 5-item scale that is based on a 7-point Likert rating format (1 = *strongly disagree* to 7 = *strongly agree*). In this article, we refer to this measure as the measure of Job Satisfaction. The internal consistency estimate for the SWWS in the present study was $\alpha = .78$, indicating that it possessed adequate reliability.

Intentions to Implement. The Modified-Intentions to Use Scale (MIUS) includes 5 items, modified to specifically assess teachers' intentions to implement EBPs. The scale is based on work investigating practitioners' intention to adhere to measurement-based care (Kortteisto, Kaila, Komulainen, Mantyranta, & Rissanen, 2010) and included language consistent with the recommendations from Ajzen (2002) when developing measures to assess behavioral intentions within the widely established TPB. Research has shown that it is a reliable and valid method of measuring intention (Webb & Sheeran, 2006). The internal consistency estimate obtained in the present study ($\alpha = .75$) indicated that the MIUS possessed adequate reliability.

Intervention Rating Profile. Teachers rated the acceptability of the ARC after the final session by completing the Intervention Rating Profile (IRP-15; Martens, Witt, Elliott, & Darveaux, 1985). The IRP-15 is a 15-item scale that was developed to evaluate the perceived acceptability, reasonableness, and effectiveness of a given intervention or program. The items ranged from a low of 1 (*strongly disagree*) to a high of 6 (*strongly agree*). Internal consistency estimates ($\alpha > .90$) have been shown to be adequate (Martens et al., 1985).

Data Analytic Strategy

Statistical analyses consisted of calculating descriptive and inferential statistics to address primary and secondary research questions. Descriptive statistics (including measures of central tendency and variability) were computed to describe the participants' scores on the dependent variables (DVs) for both pre- and post-intervention. Inferential statistics included a series of independent samples *t* tests and factorial analyses of variance (ANOVAs) using pre- and post-scores as the dependent variables to evaluate whether there were statistically significant differences between the treatment and control groups. However, for the Job Satisfaction measure, due to differences between groups at baseline, a one-way analysis of covariance (ANCOVA) was performed using pre-intervention scores as the covariate and post-intervention scores as the dependent variable. Finally, to estimate the magnitude of the effects produced by the ARC, standardized mean difference effect sizes (SMDES) were computed. Specifically, the following formula was used because it controls for preexisting differences between treatment and control groups (Fritz, Morris, & Richler, 2012):

$$\text{SMDES} = \left[\frac{\left(M_{post,T} - M_{pre,T}\right) - \left(M_{post,C} - M_{pre,C}\right)}{SD_{pre}} \right] \tag{1}$$

This formula subtracts the change in pre–post mean scores from the control group from the change in the pre–post mean scores from the treatment group and divides this number by the standard deviation of the pre-test scores. Therefore, the difference between treatment and control is interpreted in standard deviation units.

Results

Descriptive Statistics

The descriptive statistics for the outcome variables are depicted in Table 1. Measures of central tendency on the outcome variables at pre-intervention indicated that teachers in the ARC and AC groups were relatively similar on all measures with regard to means, standard deviations, and range. Data also indicated that although the means were relatively stable for the AC group across pre-intervention and post-intervention observations, the means for the ARC group changed in the hypothesized direction across pre-intervention and post-intervention measurement periods. The ARC group demonstrated the greatest amount on the PSS ($\Delta = 3.00$) and the least on the TSES measure ($\Delta = 1.84$).

Table 1
Descriptive Statistics: Means, Standard Deviations, and Range for Outcome Variables

	Pre				Post			
Outcome Variables	Mean	*SD*	Min.	Max.	Mean	*SD*	Min.	Max.
Perceived Stress								
Treatment (ARC)	15.50	6.22	5	26	12.50	3.91	6	24
Control (AC)	16.22	6.00	6	26	16.86	4.83	8	27
Self-Efficacy								
Treatment (ARC)	13.31	3.42	5	18	15.05	2.17	11	18
Control (AC)	13.04	3.06	4	18	12.88	3.06	8	18
Job Satisfaction								
Treatment (ARC)	24.54	4.68	14	32	27.88	4.08	18	35
Control (AC)	21.65	4.90	10	30	22.14	5.10	12	31
Intentions to Implement								
Treatment (ARC)	18.05	4.89	7	28	20.77	3.65	13	28
Control (AC)	17.90	5.06	10	28	17.17	4.29	9	26

Note. AC = attention-control; ARC = ACHIEVER Resilience Curriculum; max. = maximum; min. = minimum.

Inferential Statistics

All assumptions with regard to performing ANOVAs were assessed and met (e.g., sphericity, multivariate normality, homoscedasticity). In the case of the self-efficacy and job satisfaction scales, the data were slightly non-normal (negatively skewed; Kolmogorov-Smirnov = .98 and 1.16, respectively). As a result, a square root transformation was performed to normalize the data for these two outcome variables (Tabachnick & Fidell, 2013). In total, four separate ANOVAs were performed to determine whether there were significant differences between the treatment and control groups. To control for multiple comparisons, the Holm-Bonferroni correction was employed to control the familywise error rate, which consists of adjusting the rejection criteria systematically for each of the individual hypotheses.

Perceived Stress Scale. The mixed factorial ANOVA included one within-subject factor (Time: pre and post) and one between-subject factor (Experimental condition: treatment and control). The results of the mixed factorial ANOVA are displayed in Table 2. The first step in analyzing the results was to assess the significance of the Time*Treatment Group interaction effect, given that a significant interaction effect renders the interpretation of the main effects invalid (Tabachnick & Fidell, 2013). The results indicated there was a significant interaction effect between time and treatment group, $F(1, 42) = 11.55$, $p = 0.001$, even after adjusting the rejection criteria based on the Holm-Bonferroni correction ($p < .01$). To interpret the significant interaction, the pre- and post-intervention means for the treatment and control groups were plotted in a graph (see Figure 1A). Both groups were not significantly different at baseline, $t(1) = -.40$, $p = .70$, and it was not until the introduction of the intervention that participants in the ARC group experienced a reduction in their perceived stress, whereas perceived stress for the AC group remained relatively constant. The SMDES associated for this outcome variable was .69, which indicates that there was greater than one-half standard deviation difference between the change in perceived stress reported by the ARC group versus AC group. According to Cohen (1988), this effect size is moderate, indicating a likely noticeable and meaningful effect.

Table 2
Results from Mixed Factorial ANOVAs Examining Differences in Pre–Post Changes Between Treatment and Control Groups

	F	*df*	*p*	Effect Size[a]
Stress				
Time	4.89	1, 42	.033	–
Time*Condition	11.55	1, 42	.001	.69
Self-Efficacy				
Time	10.59	1, 42	.002	–
Time*Condition	8.58	1, 42	.005	.64
Intentions to Implement				
Time	6.67	1,42	.013	–
Time*Condition	17.23	1, 42	< .001	.77

Note: ANOVA = analysis of variance.
[a]Standardized mean difference effect size between treatment and control group. Effect size interpretation guide: .00–.29 = negligible, .30–.49 = small, .50–.79 = moderate, .80+ = large.

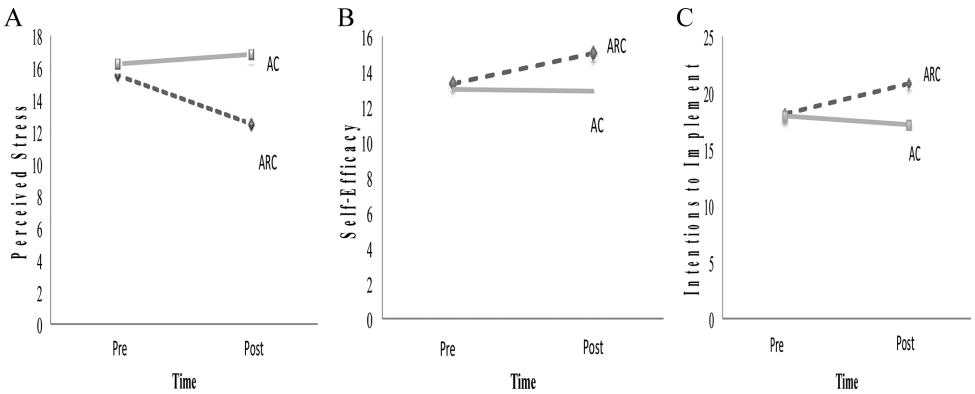

FIGURE 1. Pre- and post-study means for ACHIEVER Resilience Curriculum (ARC) and attention control (AC) groups on the main outcomes variables: (A) Perceived Stress, (B) Self-Efficacy, and (C) Intention to Implement.

Teacher Self-Efficacy. The results indicated there was a significant interaction effect between time and treatment group, $F(1, 42) = 8.58$, $p = .005$, even after adjusting the rejection criteria based on the Holm-Bonferroni correction ($p < .0125$). As one can see in Figure 1B, both groups had comparable means at baseline, $t(1) = .26$, $p = .80$, and after the ARC was implemented, the ARC group demonstrated a significant increase in self-efficacy relative to the control group. The SMDES for self-efficacy was .64, indicating a moderate effect according to Cohen's (1988) guidelines.

Job Satisfaction. Given that there were significant differences between the ARC and AC groups at baseline, $t(1) = 2.02$, $p = .04$, a one-way ANCOVA was performed using pre-intervention scores as the covariate and post-intervention scores as the dependent variables. The results of the ANCOVA are displayed in Table 2, indicating a significant main effect for the condition, $F(1, 42) = 6.72$, $p = .05$. When examining the adjusted means after controlling for pre-intervention scores, the treatment group was associated with a significantly higher job satisfaction mean than the AC group. The obtained SMDES was moderate (.57) according to Cohen's (1988) guidelines, which is an effect that should be noticeable by untrained observers.

Intentions to Implement. The mixed factorial ANOVA results indicated there was a significant interaction effect between time and treatment group, $F(1, 42) = 17.23$, $p < .001$. To interpret the significant interaction, the pre- and post-intervention means for the treatment and control groups are shown in Figure 1C. Both groups had comparable pre-intervention scores at baseline, $t(1) = .09$, $p = .93$, and it was not until the introduction of the ARC group was there an association with an increase in intentions to implement, whereas the AC group demonstrated a slight decrease. Similarly, the SMDES associated with this analysis was .77, which also indicates that there was three fourths of a standard deviation difference in the change for the ARC group compared with the AC group. According to Cohen (1988), this represents a moderate effect, approaching a large one, that should be noticeable by untrained observers.

Social Validity

Only the teachers in the treatment group were asked to complete the social validity questionnaire—IRP-15 (Martens et al., 1985). The results for the IRP-15 indicated that participating teachers found the ARC to be reasonable, acceptable, and effective. The average rating across all 15 items for the three teachers was 5.7 on a scale from 1 to 6 (minimum = 5.4 and maximum = 6.0), indicating that teachers either agreed or strongly agreed with items assessing the reasonableness, acceptability, and likely effectiveness of the ARC. Four of the 15 items received an average of rating of 6, indicating that the teachers strongly agreed with the statement. These items included: "this would be an acceptable intervention to help improve teachers' well-being," "I found at least a few the practices used in the ARC intervention to be helpful," "the ARC includes practices that could help teachers perform better in the classroom," and "this intervention would not result in negative side effects for teachers."

In addition, participants were asked which practices they found most beneficial and planned on incorporating into their professional and personal lives. The results revealed the following: 100% of participants indicated that they wanted to continue the exercise, eat well, and engage in good sleep practice; 90% ($n = 20$) indicated a desire to continue the awareness and empowerment through mindfulness practice; 77% ($n = 17$) reported the desire to continue to use values clarification and commitment, practicing gratitude, and identifying unhelpful thoughts and adjusting them to be more helpful; 50% ($n = 11$) reported wanting to continue to use helping and doing good deeds for others and establishing good role models and social supports practices; and 37.5% reported the desire to continue rewards via relaxation and recreation practice.

Discussion

Teacher well-being and implementation of evidence-based classroom practices are both topics worthy of scientific inquiry, yet few research studies have linked these two areas of research. Moreover, few studies to date have experimentally examined the impact of interventions designed to promote aspects of teacher well-being. In light of these gaps in the extant research base, the purpose of this study was to conduct a randomized controlled trial investigating the impact of the ARC to improve indicators of well-being and intentions to implement EBPs among secondary teachers.

Findings from this study provide evidence supporting the development and delivery of theoretically based resilience trainings that target promoting teachers' well-being and improve their intentions to implement high-quality practices. Indeed, the results revealed that the ARC produced a significant impact on all four outcomes measured in this study. Teachers in the ARC group reported moderate reductions in perceived stress, moderate improvements in self-efficacy, moderate increases in job satisfaction, and moderately stronger intentions to implement EBPs than teachers assigned to the AC group.

The social validity findings are particularly worth noting, considering that teachers perceived the ARC to be feasible, acceptable, appropriate, and effective. Overall, every participating teacher in the ARC group reported that they intended to continue to use the physiological practice (sleep, eating, and exercise), and a large majority reported that they found mindfulness-based practices effective and intended to use them in the future. Given that most teachers found these two practices useful, it begs the question of whether a focus on these two practices alone would be sufficient to produce well-being benefits for a significant number of teachers, thereby, enabling more efficient and feasible delivery of well-being training for teachers. Given the multiple practices integrated into the ARC, it is impossible to discern which practices were responsible for the positive outcomes and which ones could be left out.

Implications

The results from this study offer several important implications for both research and practice. First, the findings contribute to implementation science research, which is devoted to understanding the factors that impact the uptake, use, and sustainment of EBPs. Although most conceptual implementation frameworks include individual-level factors that facilitate or impede the adoption of effective practices, few have incorporated the well-being of implementers as an important facet of the adoption and implementation process. Research using the TPB (Ajzen, 1985) has demonstrated that behavioral intentions are the most proximal and potent predictor of individual behavior (Cook et al., 2015). Thus, teachers who report greater intentions to implement EBPs in the classroom are more likely to change their behavior in a way that implements said practices with fidelity. When considering the findings from this study in the context of the TPB, results indicate that intentionally teaching teachers practices that enable them to effectively manage stress and cultivate well-being may help create greater system readiness to facilitate the uptake and use of EBPs. Indeed, one of the more significant barriers preventing the adoption, use, and sustainment of EBPs may be teacher stress and burnout (Aarons, Fettes, Flores, & Sommerfield, 2009). The results suggest that stress, and lower levels of self-efficacy are likely to decrease a teacher's willingness and intentions to try new practices.

Second, this study's findings have implications for teacher preparation and ongoing support. In a cursory review of the top teacher preparation programs in the country, none of them included a course on teacher well-being, stress management, or resilience. Given the findings of this study and previous studies, the University of Washington has created a resilience course for undergraduate students in the Early Childhood and Family Studies major, as many of the graduates pursue a career in the teaching profession. Researchers, policymakers, and higher education leaders should consider the creation of evidence-informed policy that calls for intentional practices that target promoting the well-being of educators, considering the important role it plays in creating a stable and emotionally competent workforce that is committed to implementing the best practices possible to achieve positive outcomes for students.

Third, these findings suggest that there is a need for school districts to create an infrastructure of supports that target educators' well-being. Too often, the well-being of the teachers is ignored, and the results are that teachers who are stressed and overwhelmed leave the profession and interact ineffectively with students. Despite intense pressure and efforts to increase accountability (e.g., teacher evaluation) and capacity to deliver effective practices (e.g., Common Core Standards), educational administrators need to adopt a balanced perspective that values teacher well-being as an essential piece to creating high-quality learning environments in which students thrive. The results of this study suggest that school systems will ultimately need to go beyond believing that it is

important to support the well-being of teachers to actually delivering supports that target promoting their well-being.

Fourth, the findings from this study along with the growing evidence from other studies support the use of mindfulness training for teachers and students in educational settings (e.g., Frank et al., 2013; Mendelson et al., 2010; Napoli, Krech, & Holley, 2005; Singh et al., 2007; Van de Weijer-Bergsma, Langenberg, Brandsma, Oort, & Bogels, 2012). Although mindfulness was a central feature of the ARC and is often the sole focus of training in other programs, researchers and practitioners need to consider other practices that could help improve teachers' ability to effectively manage stress and increase their sense of self-efficacy and satisfaction with their work. The ARC represents a unique program in that it integrates multiple theoretical paradigms and corresponding practices into a single program, with the goal of exposing teachers to a wide range of practices that could potentially be beneficial to them.

Last, this study's findings has several implications for school psychological practice. First, school psychologists can play a critical role in advocating for the importance of specific resilience and well-being promoting practices for educators. Second, findings from this study and others suggest that school psychology training programs should equip school psychologists with the knowledge and skills to promote teacher resilience and well-being. Third, school psychologists should examine stress and burnout as individual-level barriers to teachers' successful adoption and implementation of EBPs. Removing stress and burnout alleviate significant barriers to a teacher's willingness to implement EBPs that target class-wide or individual student outcomes.

Limitations and Future Directions

The results of this study should be considered in light of several methodological limitations. First, these results are deemed preliminary and are based on a limited number of participants who lacked diversity. Considering that replication is important for establishing the generalizability of results, and that replicated results are further validated when obtained across diverse samples of participants and research teams (Kratochwill & Shernoff, 2004), it is clear that more research on the ARC and other well-being–promoting interventions is warranted. Second, although behavioral intentions have been shown to be a significant predictor of actual behavior, this study measured only teachers' intentions to implement EBPs. Future research should examine whether well-being–promoting interventions result in actual improved adoption and implementation of EBPs by teachers. Third, given the limited sample size, moderator analyses could not be performed to determine with whom and under what conditions well-being–promoting interventions are likely to be effective for teachers. Fourth, this study used only self-report measures. It is possible that the findings are due to a positive perceptual bias that was influenced by participation in the intervention. Future research should use multiple sources of data to analyze the impact of teachers' well-being. Fifth, participants' baseline well-being practices were not assessed to examine whether they moderated the impact of the resilience training. It is entirely possible that teachers who engaged in poor sleep, limited physical activity, and ate poorly at baseline were most likely the beneficiaries of the resilience training (i.e., had greater room for improvement). Sixth, given the recruitment procedures used in this study, there is the potential for self-selection bias, which impacts the representativeness of the sample and therefore limits the external validity of the findings. Readers are encouraged to generalize the findings to teachers who would be willing to participate in a study on cultivating resilience. Future research should explore the impact of the ARC with a more representative sample of teachers. Last, this study did not include the collection of follow-up data, which questions whether the positive findings would sustain into the future. Future research should examine longer-term outcomes of well-being–promoting interventions for teachers.

It is also important to recognize that this study did not promote contextual factors that would support teachers' resilience. This is a significant limitation because a well-rounded approach to promoting teacher well-being would not only promote individual-level skills, habits, and routines but would also cultivate an environment and organizational climate that promotes well-being. Indeed, numerous studies have demonstrated the link between organizational context and stress and well-being (Thoonen, Sleegers, Oort, Peetsma, & Geijsel, 2011). Ultimately, optimal learning environments for students will be created when the adults have the skills necessary to promote their own well-being and are open to implementing innovative practices (i.e., EBPs) that have been linked to improved student outcomes.

References

Aarons, G. A., Fettes, D. L., Flores, L. E., & Sommerfield, D. H. (2009). Evidence-based practice and staff emotional exhaustion in children's services. Behavior Research & Therapy, 47, 954–960.

Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), Action control: From cognitions to behaviors (pp. 11–39). New York: Springer

Ajzen, I. (2002). Constructing a TPB Questionnaire: Conceptual and Methodological Considerations. Retrieved on May 15, 2015 from http://www-unix.oit.umass.edu/˜aizen/pdf/tpb.measurement.pdf.

Alliance for Excellent Education. (2014). On the path to equity: Improving the effectiveness of beginning teachers (Issue brief). Retrieved from http://all4ed.org/reports-factsheets/path-to-equity/

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. British Journal of Social Psychology, 40, 471–499.

Bandura, A. (1986). Social foundations of thought and action. A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28, 117–148.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.

Barrett, P. M. (1998). Group therapy for childhood anxiety disorders. Journal of Clinical Child Psychology, 27, 459–468.

Benson, P. L., Scales, P. C., Leffert, N., & Roehlkepartain, E. C. (2011). A Fragile Foundation: The State of Developmental Assets among American Youth. Minneapolis, MN: Search Institute.

Biglan, A., Layton, G. L., Jones, L. B., Hankins, M., & Rusby, J. C. (2011). The value of workshops on psychological flexibility for early childhood special education staff. Topics in Early Childhood Special Education, 32, 196–210.

Blais, M. R., Lachance, L., Forget, J., Richer, S., & Dulude, D. M. (1991). Satisfaction with work scale. Presented at the annual Society for Social Research Conference in Trois-Rivières, Québec.

Bobek, B. L. (2002). Teacher resiliency: A key to career longevity. The Clearing House, 75(4), 202–205.

Clunies-Ross, P., Little, E., & Kienhuis, M. (2008). Self-reported and actual use of proactive and reactive classroom management strategies and their relationship with teacher stress and student behaviour. Educational Psychology, 28, 693–710.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. Archives of General Psychiatry, 60, 837–844.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health Social Behavior, 24, 386–396.

Cook, C. R., Lyon, A. R., Kubergovic, D., Wright, D. B., & Zhang, Y. (2015). A supportive beliefs intervention to facilitate the implementation of evidence-based practices within a multi-tiered system of supports. School Mental Health, 7, 49–60.

Csikszentmihaly, M., Rathnude, K., & Whalen, S. (1993). Talented teenagers. Cambridge, England: Cambridge University Press.

Darling-Hammond, L. (2001). The challenge of staffing our schools. Educational leadership, 58, 12–17.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. Journal of Personality Assessment, 49, 71–75.

Evans, P. (2003). The relationship between management style and teacher stress. Nottingham, UK: National College for School Leadership.

Fleming, J. L., Mackrain, M., & LeBuffe, P. A. (2013). Caring for the caregiver: Promoting the resilience of teachers. In S. Goldstein & R. B. Brooks (Eds.), Handbook of resilience in children (pp. 387–397). New York: Springer.

Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. Mind, Brain, and Education, 7, 182–195.

Forman, S. G., Shapiro, E. S., Codding, R. S., Gonzales, J. E., Reddy, L. A., Rosenfield, S. A., et al. (2013). Implementation science and school psychology. School Psychology Quarterly, 28, 77–100.

Frank, J. L., Reibel, D., Broderick, P., Cantrell, T., & Metz, S. (2013). The effectiveness of mindfulness-based stress reduction on educator stress and well-being: Results from a pilot study. Mindfulness, 6, 208–216.

Fritz, C. O., Morris, P. E., & Richler, J. J. (2012). Effect size estimates: Current use, calculations, and interpretation. Journal of Experimental Psychology: General, 141, 2–18.

Gerber, E. B., Whitebook, M., & Weinstein, R. S. (2007). At the heart of child care: Predictors of teacher sensitivity in center-based child care. Early Childhood Research Quarterly, 22, 327–346.

Glisson, C., Schoenwald, S. K., Kelleher, K., Landsverk, J., Hoagwood, K. E., Mayberg, S., & Green, P.. (2008). Therapist turnover and new program sustainability in mental health clinics as a function of organizational culture, climate, and service structure. Administration and Policy in Mental Health and Mental Health Services Research, 35(1), 124–133.

Goleman, H., & Guo, H. (1998). What we know and what we don't know about burnout among early childhood care providers. Child & Youth Care Forum, 27, 175–199.

Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. Teaching and Teacher Education, 24, 1349–1363.

Gu, Q., & Day, C. (2013). Challenges to teacher resilience: Conditions count. British Educational Research Journal, 39, 22–44.

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. Behaviour Research and Therapy, 44, 1–25

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). Acceptance and Commitment Therapy: The process and practice of mindful change. New York: The Guilford Press.

Higgins, E. T., Rholes, W. S. (1978). Saying is believing: Effects of message modification on memory and liking for the person. Journal of Experimental Social Psychology, 14, 363–378.

Hoagwood, K., & Erwin, H. D. (1997). Effectiveness of school-based mental health services for children: A 10-year research review. Journal of Child and Family Studies, 6, 435–451.

Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. Social Psychology of Education, 7, 399–420.

Individuals with Disabilities Education Improvement Act of 2004. Public Law 108–446. U.S. Code. 20 2004. § 1400 et seq.

Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. Journal of Applied Psychology, 71, 630–640.

Jarvis, M. (2002, January). Teacher stress: A critical review of recent findings and suggestions for future research directions. Stress News, 14, 1–13.

Jennings, P. A. (2011). Promoting teachers' social and emotional competencies to support performance and reduce burnout. In A. Cohan & A. Honigsfeld (Eds.), Breaking the mold of pre-service and inservice teacher education: Innovative and successful practices for the 21st century (pp.133–143). New York, MD: Rowman & Littlefield.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 79, 491–525.

Jorde-Bloom, P. (1986). Teacher job satisfaction: A framework for analysis. Early Childhood Research Quarterly, 1, 167–183.

Joyce, B., Weil, M., & Calhoun, E. (2004). Models of teaching (7th ed.). Boston, MA: Allyn and Bacon.

Jurado, D., Gurpegui, M., Moreno, O., & de Dios Luna, J. (1998). School setting and teaching experience as risk factors for depressive symptoms in teachers. European Psychiatry, 13, 78–82.

Kazdin, A. E., & Weisz, J. R. (2003). Context and background of evidence-based psychotherapies for children and adolescents. In A. Kazdin, & J. Weisz (Eds.), Evidence-based psychotherapies for children and adolescents (pp. 21_40). New York: Guilford Press.

Konstantopoulos, S. (2014). Teacher effects, value-added models, and accountability. Teachers College Record, 116, 1–21.

Kortteisto, T., Kaila, M., Komulainen, J., Mäntyranta, T., & Rissanen, P. (2010). Healthcare professionals' intentions to use clinical guidelines: a survey using the theory of planned behaviour. Implementation Science, 5, 51.

Kratochwill, T. R., & Shernoff, E. S. (2004). Evidencebased practice: Promoting evidence-based interventions in school psychology. School Psychology Review, 33(1), 34–48.

Kyriacou, C. (2001). Teacher stress: Directions for future research. Educational Review, 53, 27–35.

Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. L. Perrewe & D. C. Ganster (Eds.), Research in occupational stress and well-being: Vol. 3. Emotional and physiological processes and positive intervention strategies (pp. 91–134). Oxford, United Kingdom: JAI Press/Elsevier.

Manlove, E. E., & Guzell, J. R. (1997). Intention to leave, anticipated reasons for leaving, and 12-month turnover of child care center staff. Early Childhood Research Quarterly, 12, 145–167.

Martens, B. K., Witt, J. C., Elliott, S., & Darveaux, D. (1985). Teacher judgments concerning the acceptability of school based Social Stories 543 interventions. Professional Psychology: Research and Practice, 16, 191–198.

Masten, A. S., & Reed, M. G. J. (2002). Resilience in development. In C. R. Snyder, & S. Lopez (Eds.), Handbook of positive psychology (pp. 74–88). Oxford, UK: Oxford University Press.

Mayer, G. R. (1995). Preventing antisocial behavior in the schools. Journal of Applied Behavior Analysis, 28, 467–478.

Mendelson, T., Greenberg, M. T., Dariotis, J. K., Feagans, G. L., Rhoades, B. L., & Leaf, P. J. (2010). Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. Journal of Abnormal Child Psychology, 38, 985–994.

Miller, M. D., Brownell, M. T., & Smith, S. W. (1999). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. Exceptional Children, 65, 201–218.

Mitchell, M. M., & Bradshaw, C. P. (2013). Examining classroom influences on student perceptions of school climate: The role of classroom management and exclusionary discipline strategies. Journal of School Psychology, 51, 599–610.

Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. Canadian Journal of Education, 28, 458–486.

Napoli, M., Krech, P. R., & Holley, L. C. (2005). Mindfulness training for elementary school students: The attention academy. Journal of Applied School Psychology, 21, 99–125.

No Child Left Behind Act of 2001. Public Law 107–334, U.S. Code. 20 2001. § 6301 et seq.

Öst, L. G. (2008). Efficacy of the third wave of behavioral therapies: A systematic review of meta-analysis. Behaviour Research and Therapy, 46, 296–321.

Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A handbook and classification. Washington, DC: American Psychological Association.

Renshaw, T. L., Long, A. C., & Cook, C. R. (2015). Assessing teachers' positive psychological functioning at work: Development and validation of the Teacher Subjective Wellbeing Questionnaire. School Psychology Quarterly, 30, 289–306.

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy Scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35–37). Windsor, UK: NFER-Nelson.

Schwarzer, R., Schmitz, G. S., & Daytner, G. T. (1999). Teacher selfefficacy. Retrieved May 6, 2015, from http://userpage.fu-berlin.de/health/author.htm

Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. Oxford Review of Education, 35(3), 293–311.

Seligman, M. E. P. (2002). Authentic happiness. New York, NY: Free Press

Shahjahan, R. A. (2011). Decolonizing the evidence-based education and policy movement: revealing the colonial vestiges in educational policy, research, and neoliberal reform. Journal of Education Policy, 26, 181–206.

Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009). Professional development in early childhood programs: Process issues and research needs. Early Education and Development, 20, 377–401.

Simon, S. B., Howe, C. W., and Kirschenbaum, H. (1978). Values Clarification: A Handbook of Practical Strategies for Teachers and Students. New York: NY: Hart Publishing Company.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. Journal of Clinical Psychology, 65(5), 467–487

Singh, N. N., Lancioni, G. E., Winton, A. S., Karazsia, B. T., & Singh, J. (2013). Mindfulness training for teachers changes the behavior of their preschool students. Research in Human Development, 10, 211–233.

Singh, N. N., Lancioni, G. E., Winton, A. S. W., Singh, J., Curtis, W. J., Wahler, R. G., & McAleavey, K. M. (2007). Mindful parenting decreases aggression and increases social behavior in children with developmental disabilities. Behavior Modification, 31, 749–771.

Spencer, T. D., Detrich, R., & Slocum, T. A. (2012). Evidence-based practice: A framework for making effective decisions. Education and Treatment of Children, 35, 127–151.

Tabachnick, B. G., & Fidell, L. S. (2013). Using Multivariate Statistics, 6th ed. Boston, MA: Pearson.

Thoonen, E. E. J., Sleegers, P. J. C., Oort, F. J., Peetsma, T. T. P., & Geijsel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors and leadership practices. Educational Administration Quarterly, 47, 496–536.

Van de Weijer-Bergsma, E., Langenberg, G., Brandsma, R., Oort, F. J., & Bogels, S. M. (2012). The effectiveness of a school-based mindfulness training as a program to prevent stress in elementary school children. Mindfulness, 5, 238–248.

Webb, T., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta analysis of experimental evidence. Psychological Bulletin, 132, 249–268.

Yoon, B. (2008). Uninvited guests: The influence of teachers' roles and pedagogies on the positioning of English language learners in the regular classroom. American Educational Research Journal, 45, 495–522.