

THESIS

EVALUATION OF RESILIENCE IN SCHOOLS AND EDUCATORS (RISE): AN ADULT-
CENTERED SOCIAL-EMOTIONAL LEARNING PROGRAM FOR K-12 EDUCATORS

Submitted by

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ABSTRACT

EVALUATION OF RESILIENCE IN SCHOOLS AND EDUCATORS (RISE): AN ADULT-CENTERED SOCIAL-EMOTIONAL LEARNING PROGRAM FOR K-12 EDUCATORS

Educators' mental health and well-being has become imperative to address post the COVID-19 pandemic as the risk for burnout has increased (Jennings & Greenburg 2009; Schonert-Reichl, 2017; Oliveira et al., 2021). However, current research on adult-focused social-emotional learning (SEL) programs aimed at increasing educator well-being is still new (Oliveira et al., 2021). The present study examines the Resilience in Schools and Educator's program (RISE) program, developed by the Center for Resilience & Well-being, through the University of Colorado, Boulder, focusing on universal, school-based prevention specifically for educators (Fitzgerald et al., 2021). RISE aims to enhance educators' social-emotional competence (SEC), emotion-focused relationship skills and resilience. The goal of the current study was to confirm the factor structures of the three main constructs within the RISE logic model (e.g., Educator SEC, RISE Skills and Educator Well-being) and determine if there was mediation present between these constructs and program dosage on educator well-being. Results demonstrated that no direct associations were found between number of workshops ($b = 0.002$, $SE = 0.007$, $p > 0.05$) and number of coaching sessions ($b = -0.007$, $SE = 0.006$, $p > 0.05$) and educator well-being as well as no indirect associations between dosage and well-being mediated by Educators' SEC or RISE Skills. Future recommendations for the RISE program are discussed.

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INTRODUCTION

Decades of research have found that teaching is one of the most challenging yet rewarding professions within the human services field (Schonert-Reichl, 2017). Teaching is rewarding when K-12 educators feel they have a positive role in their students' academic and behavioral success. However, when educators feel unable to support students, it can be detrimental to educator well-being. Educator mental health and well-being have received increased attention due to worsening stress and burnout over the past decade and have become even more imperative after the COVID-19 pandemic. In their COVID-19 social policy report, Luthar et al. (2021) argued that now more than ever, we must “deliberately prioritize an ‘upstream’ approach” (p. 2) by providing mental health support for educators, counselors, administrators, and staff, as they are at high risk for burnout.

Educator mental health and well-being is cultivated by increasing educator self-efficacy (Ross et al., 2012) and strengthening social-emotional competencies (SEC) and mindfulness techniques to build self-awareness, emotion regulation, empathy, and relationship skills (Jennings & Greenberg, 2009). However, few studies have rigorously evaluated educator-focused SEL programs (Brown et al., 2023; Jennings et al., 2013; 2017; Roeser et al., 2013). Therefore, there is a pressing need to evaluate existing interventions that support educator mental health and well-being and build key skills that allow educators to respond to students' social-emotional needs and trauma-related responses in the classroom.

This study will evaluate the effect of the Resilience in Schools and Educators (RISE) program developed and implemented by the Center for Resilience and Well-being at the University of Colorado Boulder. RISE is an adult-centered social-emotional learning program facilitated by

in-school mental health professionals that builds trauma-responsive and positive school climates as well as promotes well-being and resilience in educators (Fitzgerald et al., 2021). This study has three primary goals:

1. Confirm the factor structure of the educator social emotional competencies and educator well-being scales used to test the RISE program logic model.
2. Determine how program dosage is associated with participant well-being.
3. Test whether participant social emotional competencies (SEC) and RISE-specific skills mediate the association between program dosage and participant well-being.

Each of these goals will contribute to the growing evidence for school-based, adult-focused, social-emotional learning programs.

LITERATURE REVIEW

Educator Well-Being

Educator well-being is a broad construct that has been linked to increased teaching quality, self-efficacy, and positive teacher-student relationships (Roeser et al., 2012; Ross et al., 2012; Split et al., 2011). In the American school system, educators are not only expected to actively facilitate students' academic growth but also respond moment-to-moment to students' own social and emotional needs (Jennings & Greenberg, 2009). Recognizing and appropriately expressing emotions throughout the workday can be difficult, especially when those emotions are not considered professional within the teaching environment (i.e., experiencing anger yet needing to stay calm in the face of student misbehavior) (Ross et al., 2012). When an educator sees improvement in student academic or behavior outcomes, their effort and emotional labor is reinforced. If an educator's effort or emotional labor feels negligible, their frustration, fatigue, and emotional dissonance threatens their well-being (Ross et al., 2012). Thus, positive self-assessment and relationships build educators' capacity to positively impact student outcomes, particularly for those facing challenges, and are important protective factors for educator well-being (Split et al., 2011).

Educator Burnout

Burnout has been defined as resulting from exposure to chronic job-related stressors and is characterized by three components: emotional exhaustion, depersonalization, and diminished feelings of personal accomplishment (Maslach et al., 2001). Educators face a range of emotionally demanding situations throughout the day that increase risk for emotional exhaustion, stress,

and burnout (Oliveira et al., 2021; Sohail et al., 2023). Educators commonly report feeling isolated throughout the day (Graham et al., 2011), increased struggles to meet everchanging job demands (Carlson & Kees, 2013), and experience increased personal mental health struggles (National Foundation for the Centers for Disease Control and Prevention, 2021). Recent surveys have found that 53% of educators are contemplating leaving the field (National Education Association, 2022), and that up to 40% of educators leave within the first 5 years (Alliance for Excellent Education, 2014). Educator self-reported burnout has also been associated with higher levels of student stress, behavior challenges, and lower academic achievement (Oberle et al., 2017).

In their foundational framework, *The Prosocial Classroom*, Jennings and Greenberg (2009) explained that the potential for chronic stress in educators can lead to a myriad of negative outcomes. Through their “burnout cascade” model, they explain why building educator SEC directly is so important to both educator and student success (Jennings & Greenberg, 2009). When educators experience chronic negative emotions, it can have negative effects on well-being and increase emotional distress. As exhaustion and stress increase, it can impair educator teaching efficacy, contribute to the use of more severe punishments for misbehaviors (Jennings et al., 2017), and negatively influence student engagement and academic achievement (Durlak et al., 2015; Jennings & Greenberg, 2009; Schonert-Reichl, 2017).

These negative interactions can then create a cycle for both educators and their students and eventually lead to burnout and attrition from the field (Jennings & Greenberg, 2009). Therefore, this framework has propelled efforts by researchers to identify the protective factors that decrease risk of occupational stress and burnout and increase positive classroom management and educator well-being through school-based programs. Jennings and Greenberg (2009) first argued that building educator social-emotional competencies (SEC) was the most important way

to support the management of their own emotions and student behaviors within the classroom (Jennings & Greenburg, 2009; Jennings et al., 2017).

Educator Social-Emotional Competence

Social and emotional learning (SEL) is defined as the process by which individuals acquire and apply core social emotional competencies (SEC) in five areas: self-awareness, social awareness, self-management, relationship skills, and responsible decision making (CASEL, n.d.; Durlak et al., 2015). Collectively, SEL programs, practices, and policies are an evidence-based approach that, when implemented well in schools, have been found to promote these five key competencies in youth (Durlak et al., 2022). Hundreds of studies worldwide have found consistent evidence that SEL programs building youth SEC have positive impacts on social and emotional skills, academic performance, school climate, and safety (Collaborative for Academic, Social, and Emotional Learning, 2023).

Educators mostly receive preservice training within the academic domain, and rarely receive preservice training in SEC (Oliveira et al., 2021). Research has found that scaffolding these social emotional competencies through professional development trainings and small group workshops provide in-service educators with the skills to manage their own stress and emotions (Fitzgerald et al., 2021; Jennings & Greenburg, 2009; Jennings et al., 2017; Oliveria et al., 202; Sandilos et al., 2023). Through embodying these SECs, teachers can then impact the social-emotional development of their students through modeling effective emotion regulation, scaffolding problem-solving skills in social situations, and labeling emotions (Jennings & Greenberg 2009). This increases teaching efficacy, job performance, student academic achievement, and subsequently educator well-being (Jennings & Greenburg, 2009; Oliveria et al., 2021; Sandilos et al., 2023; Schonert-Reichl., 2017).

Educator-Focused SEL Programs

SEL programs are typically based on systems theories; theories on emotional intelligence; social skills training; and theories related to development, learning, and behavior change (Durlak et al., 2015; Osher et al., 2016; Tolan et al., 2016). CASEL states that criteria for effective SEL programs should include repeated opportunities to practice, multiyear programming, and training and implementation support (CASEL, 2013). Additionally, Durlak et al. (2011) found that the most effective student-focused SEL programs were those that incorporated four elements represented by the acronym SAFE: (1) **S**equenced activities that lead in a coordinated and connected way to develop skills, (2) **A**ctive forms of learning, (3) **F**ocused on developing one or more social skills, and (4) **E**xplicit about defining the SEL skills the program was targeting.

To date, school-based SEL programs have mostly utilized educators as direct instructors of student social-emotional skills and focused solely on measuring student and classroom outcomes. However, following the prosocial classroom model, researchers have realized that educators are an integral part of the theoretical frameworks behind the impact of SEL. Schonert-Reichl (2017) stated that the frameworks for SEL programs should include three interdependent dimensions: (1) the learning context, (2) educator SEC, and (3) student SEC. Building off this research in the only review and meta-analysis of SEL programs to date for educators, Oliveria et al. (2021) explained that “SEL is based on the idea that the acquisition of SEC occurs not only within social contexts through the relationships one establishes with others but also through how each individual responds subjectively to these interpersonal experiences” (p. 3). In other words, one educator might show high levels of SEC in one context but might need additional training in another context (Jennings & Greenberg, 2009). To be effective, SEL programs should occur in

safe, caring, and warm environments so both educators and students feel safe to practice SEC skills.

It has only been within the last decade that research, prevention programs, and professional development trainings have begun to focus primarily on educator SEC development (Fitzgerald et al., 2021; Gulamhussein, 2013; Jennings & Greenburg, 2009; Marques et al., 2019; Oliveira et al., 2021; Schonert-Reichl, 2017). There have been various types of strategies used to promote educator SEC development including mindfulness, cognitive-behavioral therapy, coping skills training, and emotional intelligence training. Mindfulness is defined as moment-to-moment awareness and nonjudgment of an individual's thoughts and feelings (Roser et al., 2017). Due to the conceptual overlap of SECs and the outcomes associated with mindfulness strategies, the two approaches are often combined (Fitzgerald et al., 2021; Jennings et al., 2017; Roser et al., 2017). Using mindfulness strategies as a training mechanism for building SEC has increased the ability to provide SEL programs in the most effective way, decreasing the need for educators to implement multiple programs, yet receiving the benefits of both.

Current adult SEL programs for educators focus primarily on teaching SECs through mindfulness techniques and interactive instruction on intra- and interpersonal core skills (e.g., identifying and regulating emotions, building and maintaining positive relationships, and managing stressful situations in the classroom in a positive way) (Oliveira et al., 2021). SEL programs that utilize mindfulness practices to build educator SECs have been found to reduce stress and promote self-awareness and self-regulation, which are both important components of SEC that promote well-being (Brown et al., 2023; Fitzgerald et al., 2021; Jennings et al., 2017; Oliveira et al., 2021; Roser et al., 2017). There are several promising prevention programs that aim to build

educator SEC, mindfulness, and well-being that enhance classroom climate and effective teaching (Beames et al., 2023; Braun et al., 2019; Hirshberg et al., 2020; Hwang et al., 2017; Hwang et al., 2017; Klingbeil & Renshaw, 2018). However, these programs vary in their effectiveness.

Among the most rigorously tested teacher SEL programs that include mindfulness-techniques is the Cultivating Awareness and Resilience in Education (CARE) (Brown et al., 2023; Jennings et al., 2013; 2017). CARE is a mindfulness-based professional development program that provides to educators education on emotion skills, mindfulness/stress reduction practices, and caring listening practices. Led by three qualified facilitators, participants received a 30-hour in-person training over five training days (e.g., 6 hrs./day), followed by between-session phone coaching (Brown et al., 2023; Jennings et al., 2013; 2017). CARE has been rigorously tested three times, using a cluster randomized trial design where educators were randomized to an intervention or control condition within each school. Studies have demonstrated that compared to control groups, educators who received the intervention experienced significant improvements in emotion regulation, mindfulness, and teaching efficacy, as well as reductions in stress and physical symptoms associated with stress (e.g., sleep disturbances and emotional exhaustion) (Jennings et al., 2013; 2017).

Similar in its goals to build educator SEC, but focused on mindfulness training, is the Stress Management and Relaxation Techniques in Education (SMART) program. This program is based on the Mindfulness-Based Stress Reduction (MBSR) model designed to bring relaxation and stress management skills to educators. SMART is an 8-week, 11-session program, with 15-minute daily take-home practices for 36 contact hours. Within these trainings, participants experience group discussions and exercises (e.g., loving-kindness and forgiveness meditation). Bennett et al. (2012) and Roeser et al. (2013) conducted two small randomized controlled trials (RCTs)

with elementary school teachers in the US and Canada. They found at posttest, educators receiving SMART showed significant decreases in occupational stress and burnout, as well as increased mindfulness and self-compassion, attention abilities, and working memory compared with control group educators (Benn et al., 2012; Roeser et al., 2013). These two programs are promising evidence-based programs for promoting SEC and positive classroom interactions, as well as decreasing educator occupational stress. However, with varying content, format, and dosage, research on their efficacy is still scarce, limiting program comparisons and the establishment of guidelines for effective adult-focused SEL programs.

Current Limitations in SEL Research

Lack of Conceptual Clarity

A recent meta-analysis of universal, school-based SEL programs for youth found that they can have positive impacts on a broad range of social, emotional, and behavioral outcomes, including increased academic achievement and decreases in emotional stress (Durlak et al., 2022). Yet, the understanding of the processes that make these programs most effective has been limited (Durlak et al., 2022). Many current youth- and adult-focused SEL programs typically focus on promoting CASEL's five core SEC critical for positive development (Oliveria et al., 2021; Tolan et al., 2016). However, research on SEL program efficacy has assessed widely different frameworks (Berg et al., 2017), outcomes (Durlak et al. 2022), and even the same core skill or competency are often referred to in different ways (Osher et al., 2016). Durlak et al. (2022) stated that "complicated interventions require careful specification, and the implementation and relative contribution of each component should be assessed" (p. 30). As a result, the literature on SEL programs has faced concerns about conceptual clarity, operational definitions,

measures used, and outcomes assessed for overall program efficacy (Durlak et al., 2022; Oliveria et al., 2021).

Limited Understanding of Prevention Program Change Processes

Though most studies of current SEL programs have investigated the direct effects between SEL and educator well-being, few have tested the mediating processes through which programs are hypothesized to have their intended effects. Among the purposes that mediation analyses serve are to confirm the theoretical model upon which programs are based (i.e., whether the program leads to an improvement of the intended skills that then influence the expected outcomes over time) and determine whether adaptations or modifications need to be made to the program targets. Durlak et al. (2022) stated that, to date, no meta-analysis has tested which combination of targeted skills influence specific desired outcomes of SEL programs. Yet mediation analyses are still rare in SEL outcome research (Durlak et al., 2022), potentially due to the complexity of the SEC constructs within a program and the need to tease apart the relationships to specific program outcomes.

Few studies have tested mediating variables for programs that intend to promote educator well-being. Split et al. (2011) was the first to propose that student-teacher relationships mediated student misbehavior and educator well-being. Drawing upon this proposed mediation model, Aldrup et al. (2017) found that fulfillment of basic needs (e.g., how well educators related to their colleagues and students) as well as level of competence mediated stress exposure and educator overall well-being. A second study demonstrated that teacher well-being mediated the relation between stress with students, colleagues, and parents and educator depression (Hung et al., 2016). Finally, educator self-efficacy has been found to mediate the relation between perceived student misbehavior and teacher exhaustion, a primary component of burnout (Tsouloupas et al.,

2010). Together, these studies support existing theory (e.g., Jennings & Greenburg, 2009; Schonert-Reichl., 2017) stating that positive relationships (e.g., with both students and staff) as well as higher levels of teaching self-efficacy within multiple contexts (e.g., grade level) is the foundation for building educator well-being (Schonert-Reichl., 2017). With little knowledge of mediating factors for adult-focused SEL programs, there is a need to identify the processes through which educator SEL programs increase educators' own SEC and well-being for future prevention program adaptations and effectiveness.

Program Implementation: Program Dosage Associated with Program Effects

Program dosage is broadly defined as the 'amount' of intervention provided to participants (Tolan et al., 2016). In community-based prevention evaluation, where comparison groups are either not feasible or withholding the program from participants is deemed unethical, program dosage may be used to evaluate program impact if the assumption is the greater exposure to the program, the greater the program impact. In other words, if participant dosage is positively associated with change in program targets, it may function as a proxy for program effects (i.e., whether the observed effects, or lack of effects, can be attributed to the participants receiving an adequate amount of the intervention) (Tolan et al., 2016). However, testing for program dosage effects on adult SEL programs is scarce, adding to the importance of the current study.

Dosage can be operationalized in different ways (e.g., hours, episodes, coaching, etc.) and yet very few programs have actively used dosage as a measure for program evaluation. The only meta-analysis to study the effects of dosage on program outcomes found that dosage, when defined as total training hours, did not predict the impact of SEL interventions (Oliveria et al., 2021). Alternatively, intervention coaching has been considered another form of program dosage, and intervention support has been found to increase implementation fidelity (Kretlow et al.,

2010; Reinke et al., 2014) and be a protective factor against burnout in educators (Wehby et al., 2012). However, the amount of intervention coaching to obtain positive outcomes has yet to be studied within SEL programs. Due to the many ways dosage is defined within these programs, there is still very little understanding of the amount and type of dosage that is the most effective for adult-focused SEL programs.

Resilience in Schools and Educators (RISE) Program

The present study focuses on the Resilience in Schools & Educators (Fitzgerald et al., 2018) program that was developed by the Center for Resilience & Well-being through the University of Colorado, Boulder. RISE is a universal school-based prevention program for K-12 led by trained facilitators (e.g., a school-based or district-level educator or mental health professional). RISE aims to build educators' SEC, emotion-focused relationship skills (e.g., connection, emotion support, emotion coaching skills), and build resilience-promoting classrooms through professional development sessions, small group workshops, and ongoing individual coaching sessions across the school year. The RISE approach is highly interactive and focused on building adult SECs to embody, model, and scaffold SEC skills in moment-to-moment interactions with their students.

The RISE program combines whole-school professional development trainings on topics such as trauma, resilience, and social-emotional development along with eight small group workshops where participants can gain more in-depth practice around the RISE skills at the beginning of the year. The school year is then composed of ongoing individual coaching sessions for educators who participated in the workshops that involve developing RISE-specific goals and monitoring progress with a program facilitator. Facilitators observe educators and are encouraged to support educators' use of RISE skills as they navigate classroom challenges.

The RISE program utilizes the theoretical frameworks of emotional development and emotion socialization, contemplative science, trauma and resilience, and best practices for adult professional learning. The RISE theory of change draws from research-based program components consistent with other SEL programs as stated previously (CASEL, n.d.; Jennings & Greenberg, 2009; Jennings et al., 2013, 2017; Roeser et al., 2013; Schonert-Riechel, 2017), while adding content related to trauma-informed classrooms. Together, these components work to increase SEC, well-being, and resilience for educators, classrooms, students, and schools.

A pilot study for RISE showed promising results. Specifically, educators successfully implemented RISE with 86% fidelity, with an average of five educators per school receiving individual coaching sessions (Fitzgerald et al., 2021). These results are important, as it is difficult for evidence-based programs to balance providing sufficient dosage while still being feasible for educators to implement. Results from the pilot study also found that educator pre- and post- self-report measures indicated significant improvements in social-emotional competencies (i.e., emotion awareness identification and nonjudgment around emotions), well-being, and conflict between educators and students (Fitzgerald et al., 2021). Effect sizes indicated small to medium impacts. However, there were no significant findings for educator self-efficacy or close student-teacher relationships (Fitzgerald et al., 2021). Currently, evaluators of RISE have only studied direct effects and have yet to look at potential mediating variables affecting educator well-being. Studying these potential mediating variables is important for confirming the underlying theory and logic model of the RISE program.

CURRENT STUDY

The purpose of this study is to evaluate the RISE program by testing the hypothesized mediators of program effects using a single-group pretest-posttest design. Three research questions are proposed: (1) What is the factor structure of the educator SEC, RISE Skills, and educator well-being constructs, and to what extent do these factors align with the established logic model? (2) To what extent is RISE dosage associated with the new factor structures of RISE-specific skills, educator SEC, and well-being? (3) To what extent do educator SEC and RISE skills mediate the association between RISE program dosage and educator well-being? The following hypotheses are:

Hypothesis 1: The factor structure of educator SEC and educator well-being will be confirmed by a confirmatory factor analysis.

Hypothesis 2: There is a positive association between RISE program dosage and educator well-being.

Hypothesis 3: The association between program dosage and well-being is mediated by educators' SEC and RISE specific skills.

METHOD

Participants

Study participants are school staff ($n = 405$) from 15 schools across Colorado, who participated in the RISE 5.0 and 6.0 cohorts from fall of 2021 to spring of 2023. Participants were comprised of classroom educators and administrators ($n = 348$) and program facilitators ($n = 57$). RISE facilitators were social emotional learning specialists, school counselors, or school psychologists embedded within each school district. The RISE research team did not collect demographic information for this population.

Program Procedures

Schools were selected using purposive sampling and represented small or medium sized, racially diverse, rural, or suburban elementary and middle schools. RISE was first provided through a whole-school professional development session. Then staff would either volunteer or be required by school administration to participate in the eight RISE workshops throughout the school year. RISE workshops include practice opportunities, such as role play, and live guided practice to reinforce skill application (Fitzgerald et al., 2021). All staff who participated in the RISE workshops were invited to complete the pre- and postevaluation surveys. Presurveys and consent forms were provided in the fall before the workshops began and postsurveys and consent forms were provided in the spring of the following year depending on when the workshops were completed within each school. During the school year, participants were also able to work one-on-one with program facilitators in individual coaching and consultation sessions where they developed personal goals around RISE skills and received support for unique and difficult situa-

tions. The initial RISE evaluation was deemed exempt from review by the University's Institutional Review Board (IRB). However, nonhuman subjects approval was obtained through the Colorado State University's Institutional Review Board (IRB) for this program evaluation.

Measures

Program Dosage

RISE is delivered by trained facilitators through a combination of whole school professional development, small group workshops, and ongoing individualized coaching and consultations. At the beginning of the school year, educators attend a 3-hour whole school professional development workshop (PD). Then educators who opt-in to participate in RISE attend eight 60-75-minute workshops provided to small professional learning communities of 5-12 educators each. Throughout the school year, facilitators provided individualized coaching and consultations for educators to provide one-on-one support and facilitation of goals. These sessions varied in duration and quantity. For this project, the number of workshops attended and number of individual coaching sessions were individually summed and used to calculate program dosage.

Educator Social Emotional Competencies

The *Five Facets Mindfulness Questionnaire* (FFMQ; Baer et al., 2006) was used to assess aspects of teacher mindfulness. The RISE program utilized two of the five subscales to assess aspects of educators' judgment and reactivity to emotional responses. **The Nonjudgment Scale** includes eight items assessing participants' stances toward their inner experience (e.g., "I criticize myself for having irrational or inappropriate emotions") and **The Nonreactivity Scale** includes seven items that assess a tendency to acknowledge thoughts and feelings as they change, without getting carried away by them (e.g., "I perceive my feelings and emotions without having to react to them"). Items are rated on a 5-point Likert scale from 1 (*never or very rarely true*) to

5 (*very often or always true*). Higher scores indicate higher levels of teacher mindfulness. These scales have established internal consistency (Cronbach's α was .83 and .76 respectively for this sample) and construct validity (Baer et al., 2006; Baer et al., 2008).

Two scales of the *Difficulties in Emotion Regulation Scale* (DERS; Gratz & Roemer, 2004) assess facets of educators' social emotional competencies. **The Emotional Awareness Scale** consists of four items that assessed how often participants paid attention to how they felt (e.g., "I pay attention to how I feel"). **The Emotional Clarity Scale** consists of five items that assessed how often participants felt clarity around what they were feeling moment to moment (e.g., "I have difficulty making sense out of my feelings"). Items are rated on a 5-point Likert scale from 1 (*almost never*) to 5 (*almost always*). Higher scores indicate greater problems with emotion regulation. Cronbach's alpha values were between .72 and .79.

The *Mindfulness in Teaching Scale* (MITS, Frank, et al., 2016) assesses interpersonal mindfulness in educators. The **MITS Interpersonal Scale** consists of five items that assess the quality of the teacher's classroom interactions with students, focusing on open, accepting, and receptive approaches (e.g., "Even when it makes me uncomfortable, I allow my students to express their feelings"). Items are rated on a 5-point Likert scale from 1 (*never true*) to 5 (*always true*). Higher scores indicated greater levels of mindfulness within classroom interactions with students. Internal consistency (Cronbach's α) was .63 for this sample and test-retest reliability and construct validity has been established (Frank et al., 2016).

Educator's Use of RISE Skills

The *RISE Questionnaire* was created by RISE staff using items from *The Self-Assessing Social and Emotional Competencies Instructional and Competencies: A Tool for Teachers Social and Instructional Interactions* (Yoder, 2014) combined with new items to assess educators' use

of specific RISE skills. The RISE Questionnaire is a 27-item self-report scale that assesses four major constructs: self-awareness, emotion support, connection skills, and emotion coaching for educators. **The Connection and Validation Scale** consists of 15 items that assess educators' ability to model RISE skills in the classroom (e.g., "I reflect/repeat what students say to me when they share something important"). Items are rated on a 5-point Likert scale from 1 (*I do not implement this practice*) to 5 (*I implement this practice every chance I get*). This scale has been tested for reliability and validity and has good internal consistency (Cronbach's α was .91 for this sample). **The Emotion Management Scale** consists of 12 items that assess educators' strategies for emotion regulation in the classroom and ability to create a positive learning environment for their students (e.g., "I tune into how I am feeling and what I need during the day when with students"). Items are rated on a 5-point Likert scale from 1 (*rarely or not at all*) to 5 (*always true*). This scale has acceptable internal consistency (Cronbach's $\alpha = .82$) for this sample), but further survey analysis has not been done yet on the modified version.

Well-Being

The *Maslach Burnout Inventory – Educator Survey* (MBI-ES; Maslach & Jackson, 1981) is the leading measure of burnout for educators. The MBI-ES is a 22-item self-report survey focusing on how educators view their job- and job-related stress. The survey has three scales: emotional exhaustion, depersonalization, and personal accomplishment in one's work. **The Emotional Exhaustion Scale** measures being overworked and exhausted (e.g., I feel emotionally drained from work). **The Depersonalization Scale** measures educators' impersonal responses to students (e.g., "I don't really care what happens to some students"). **The Personal Accomplishment Scale** measures self-efficacy and accomplishment in one's work (I have accomplished many worthwhile things in this job). Items are rated on a 7-point Likert scale from 1 (*never*) to 5

(*everyday*). High scores on the emotional exhaustion and depersonalization scales and low scores on the personal performance scale shows increased risk of burnout. This scale has acceptable internal consistency with a Cronbach's $\alpha = 0.90$ for emotional exhaustion (EE), between 0.76 for depersonalization (DP), and 0.82 for personal achievement (PA). The Emotional Exhaustion and Depersonalization subscales were reverse coded so that increases in subscale scores reflected improvement in the measured constructs.

The *Positive and Negative Affect Schedule* (PANAS; Watson et al., 1988) assesses how often respondents experience positive and negative affect (i.e., emotions) over the past week. The RISE team adjusted the PANAS instruction to orient to experiencing affect over the past week "when at school." Positive affect reflects the extent to which a person feels enthusiastic and happy (Watson et al., 1988). Negative affect reflects the extent a person experiences emotional distress and adverse mood states (i.e., fear, anger, nervousness). **The Positive Affect Scale** consists of 10 items assessing several positive affective states (e.g., excited, proud, inspired). **The Negative Affect Scale** consists of 10 items assess several negative affective states (e.g., hostile, guilty, afraid). Items are rated on a 5-point Likert scale from 1 (*very slightly or not at all*) to 5 (*extremely*). Scores can range from 10 to 50 for both the Positive and Negative Affect Scales and the higher the scores the higher levels of positive/negative affect. This tool was used to measure the educator social emotional competency outcomes of emotional awareness and regulation in the RISE program. The Negative Affect scale was reverse coded so that increases in subscale scores reflected improvement in the measured constructs.

ANALYSIS PLAN

All analyses were conducted using R Core Team (2023). There was 14.4% missing data within the 14 variables, with each variable having between 7%-36% missing data. Results of Little's MCAR test indicated that the data was not missing completely at random, $\chi^2(860) = 1152.712, p < .001$, suggesting that the missing data was either missing at random (MAR) or not missing at random (NMAR) (Little, 1988). Therefore, data was imputed under the assumption of missing at random (MAR). Change scores were computed by subtracting pretest scores from posttest scores for each of the mediator variables and dependent variable. Then the data were imputed using the R package Multivariate Imputation by Chained Equations (MICE) (van Buuren & Groothuis-Oudshoorn, 2011), that included all pretest, posttest, and change scores for each subscale that comprised the RISE constructs (e.g., Rise Skills, Educator SEC, and Educator Well-being).

To assess whether the measures were testing similar constructs, correlations were computed among all scale-level variables at baseline (Table 1). These analyses aimed to detect multicollinearity, which would make it difficult to conduct a mediation analysis (see discussion in Johnston et al., 2018). The sample was then randomly split into two to emulate a training and a testing condition. First, a parallel analysis was conducted to assess the fit statistics to determine the number of factors to retain in the factor analysis. An exploratory factor analysis (EFA) model was then computed on the training half of the sample to identify the appropriate number of factors and which items loaded onto which factor. Oblique rotations with the gamma loading matrix were used to allow factors to be correlated with each other with factor loadings above .4, allowing each subscale to load onto only one component. A confirmatory factor analysis (CFA) was

then computed on the test condition of the sample to confirm the factor structure identified in the EFA. The model fit was evaluated by the standards provided by Kline (2016), RMSEA (≤ 0.06), SRMR (≤ 0.08), CFI (≥ 0.95), TLI (≥ 0.95).

Structural equation modeling (SEM), utilizing the factors confirmed in the CFA, was computed to test for direct and indirect program dosage effects. Change scores were utilized for the mediator variables and posttest scores were utilized for the dependent variable. SEM models were conducted to test a parallel mediation with both mediators added to the same model with separate independent variables. Chi-square difference tests were then computed to determine the best predictive model. Finally, a full mediation model was computed with both parallel mediation models merged into one combined model to determine if full mediation was present. Model fit was evaluated by the same standards, RMSEA (≤ 0.06), SRMR (≤ 0.08), CFI (≥ 0.95), TLI (≥ 0.95), and direct and indirect effects were determined.

RESULTS

Preliminary Analysis

Descriptive statistics for each study variable and correlations among variables can be found in Table 1. Shapiro-Wilk tests, a widely used method for testing the null hypothesis that a sample distribution is normally distributed, were computed to assess the normality assumptions of the data (Shapiro & Wilk, 1965). Results indicated that all 16 variables were not normally distributed. Therefore, maximum likelihood robust (MLR) estimation was used for hypothesis testing, due to the violations of normality assumptions to provide more reliable and accurate estimates. A bivariate correlation matrix (Table 1) demonstrated collinearity between the dosage variables and the outcome variables, with small to medium effect sizes ($r \leq .6$). This indicated that the subscales assessed similar constructs.

Factor Structures Within the RISE Logic Model

According to the parallel analysis, fit statistics suggested retaining three ($X^2 = 250.843$, RMSE = .097, TLI = 0.836) to four factors ($X^2 = 161.676$, RMSE = .085, TLI = 0.874) for further analysis. The fit statistics for the three-factor model and four-factor models were similar enough that due to parsimony and to retain the factor structure from the RISE logic model, the three-factor EFA was evaluated. Results from the EFA (Table 2) demonstrated that the PANAS Positive Affect and FFMQ Non-Judgment scale did not load strongly enough (i.e., $>.40$) onto any of the three factors, and the RISE Self-Awareness subscale loaded equally onto two factors. Therefore, both scales were removed from the final model.

Factor 1 contained four items measuring Educator SEC (e.g., clarity, awareness, nonjudgment and self-awareness subscales). Factor 2 contained five items measuring RISE Skills (e.g.,

Table 1
Baseline Descriptive Statistics for Correlations Among Continuous Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.FFMQ.NJ																
2.FFMQ.NR	.52***															
3.DERS.C	.44***	.38***														
4.DERS.A	.41***	.33***	.64***													
5. MITS	.08	.29***	.30***	.33***												
6.RISE.SA	.37***	.47***	.50***	.61***	.46***											
7.RISE.ES	.19*	.32***	.28***	.31***	.49***	.49***										
8.RISE.C	.12**	.25***	.27***	.29***	.52***	.52***	.66***									
9.RISE.EC	.15*	.25***	.30***	.35***	.44***	.52***	.63***	.69***								
10.P. P	.23***	.27***	.24***	.31***	.18***	.29***	.22***	.14***	.16**							
11.P. N	.38***	.36***	.26***	.21***	.10	.21***	.09	.06	-.06	.29***						
12.MBI.EE	.30***	.23***	.24***	.26***	.12	.26***	.16**	.02	.07	.39***	.47***					
13.MBI.DP	.26***	.20***	.29***	.28***	.24***	.22**	.24***	.17***	.14*	.29***	.27***	.46***				
14.MBI.PA	.20**	.24***	.23***	.32***	.33***	.30***	.35***	.28***	.32***	.42***	.04	-.01	.16**			
15.Workshop	-.09	-.08	-.06	-.08	.05	-.06	-.05	.07	-.05	.02	.03	-.06	-.04	-.07		
16.Coaching	-.02	-.09	-.02	0	-.01	0	-.02	.06	.07	.01	.07	-.07	-.05	.01	.56	
<i>M</i>	28.51	24.5	20.68	23.43	20.45	3.09	4.25	3.91	3.47	3.73	1.99	3.71	1.75	5.78	4.13	3.4
<i>SD</i>	6.05	4.52	2.82	4.63	2.35	.56	.59	0.63	0.92	.67	0.63	1.27	.79	.61	3.77	4.95
<i>Skew</i>	-.32	-.01	-0.86	-.69	-.08	-.26	-.74	-.35	-.17	-.42	0.71	.16	1.38	-.70	-.12	1.62
<i>Kurtosis</i>	-.36	-.09	1.18	-.16	-.02	-.06	0.23	-.32	-.58	.01	-.13	-.73	1.56	.43	-1.91	1.43

Note. FFMQ.NJ = Five Facet Mindfulness Questionnaire Non-judgment subscale; FFMQ.NR = Five Facet Mindfulness Questionnaire Non-reactivity subscale; DERS. C = Difficulties in Emotion Regulation Survey Clarity subscale; DERS.A = Difficulties in Emotion Regulation Survey Awareness subscale; MITS = Mindfulness in Teaching Survey; RISE.SA = Resilience in Schools and Educators Survey Self-awareness subscale; RISE.ES = Resilience in Schools and Educators Survey Emotional Support subscale; RISE.C = Resilience in Schools and Educators Survey Connection subscale; RISE.EC = Resilience in Schools and Educators Survey Emotion Coaching subscale; P.P = Positive Affect subscale; P.N = Negative Affect subscale; MBI.EE = Maslach Burnout Inventory Emotional Exhaustion subscale; MBI.DP = Maslach Burnout Inventory Depersonalization subscale; MBI.PA = Maslach Burnout Inventory Personal Accomplishment subscale. +* $p < .05$ ** $p < .01$ *** $p < .001$

interpersonal, emotion support, connection, self-awareness, and emotion coaching subscales). Factor 3 contained three items measuring Educator Well-being (e.g., negative affect, emotional exhaustion, and depersonalization subscales). SEC were moderately positive correlated to RISE Skills, and Well-being, whereas there was a weak correlation between RISE Skills and Well-being.

A CFA confirmed the factor structure of the three latent constructs resulting from the EFA. Model fit statistics for the three-factor model were $X^2 = 599.465$, RMSE = 0.072, CFI = 0.939, and TLI = 0.914, SRMR = 0.058 (Table 3). In the CFA three-factor model, three scales were loaded onto the Educator SEC factor, four scales were loaded onto the RISE Skills factor, and three scales were loaded onto the Educator Well-being factor.

Table 2
Subscale-Factor Loadings from Exploratory Factor Analysis

Survey Subscale	Factors		
	1	2	3
<i>DEERS</i>			
1. Clarity Subscale	.78	-.04	.09
2. Awareness Subscale	.85	.02	-.05
<i>FFMQ</i>			
3. Non-reactivity Subscale	.19	.15	.30
4. Nonjudgment Subscale	.45	-.09	.32
<i>MITS</i>			
5. Interpersonal Subscale	.05	.60	.06
<i>RISE Skills</i>			
6. Self-Awareness Subscale	.50	.42	.05
7. Emotion Support Subscale	-.03	.81	.14
8. Connection Subscale	-.03	.87	-.08
9. Emotion Coaching Subscale	.08	.75	-.07
<i>PANAS</i>			
10. Positive Affect Subscale	.15	.20	.32
11. Negative Affect Subscale	.22	.10	.58
<i>MBI</i>			
12. Emotional Exhaustion Subscale	-.04	-.03	.77

13. Depersonalization Subscale	.02	.15	.64
14. Personal Accomplishment Subscale	.20	.27	-.04

Note. Factor loadings above .4 are in bold. DERS = Difficulties in Emotion Regulation Survey; FFMQ = Five Facet Mindfulness Questionnaire Survey; MITS = Mindfulness in Teaching Survey; RISE Skills = Resilience in Schools and Educators Skills Survey; PANAS = Positive and Negative Affect Survey; MBI = Maslach Burnout Inventory.

Table 3
Factor Correlations

	1	2	3
1. SEC	--		
2. RISE Skills	.42	--	
3. Well-being	.40	.10	--

Mediation Analysis

All SEM models were computed using the Lavaan package in R (Rosseel, 2012). Results demonstrated that neither the direct effect of the number of workshops ($b = -0.082, SE = 0.006, p > .05$) nor the number of coaching sessions ($b = -0.056, SE = 0.004, p > .05$) were significantly associated with Educator Well-being. Due to moderate positive correlation between the two dosage variables (Table 1), two separate SEM models were computed first to determine the association between the dosage variables (e.g., number of workshops and number of coaching sessions) and Educator Well-being. Because no significant direct effects were found between either variable of program dosage and educator well-being, true mediation was not possible. The Satorra-Bentler chi-square difference test (Satorra & Bentler, 1994) revealed a significant improvement in fit between the two parallel mediation models and the full RISE model (Figure 1). Specifically, the full RISE model was found to be statistically more predictive for RISE coaching ($X^2(46, N = 405) = 166.51, p < .001$) compared to the number of workshops (X^2

(46, $N = 405$) = 4.59, $p > .05$). Therefore, due to prior theory in the RISE logic model, the full RISE model was deemed the most predictive model to assess direct and indirect effects compared to the previous models. Due to the medium correlations between the two program dosage variables and the medium correlations between educator SEC and RISE skills, these variables were made to covary with one another within the model. Fit statistics of the final model (Figure 1) were not acceptable and included $X^2 = 1287.351$, RMSE = 0.116, CFI = 0.80, and TLI = 0.705, SRMR = .084.

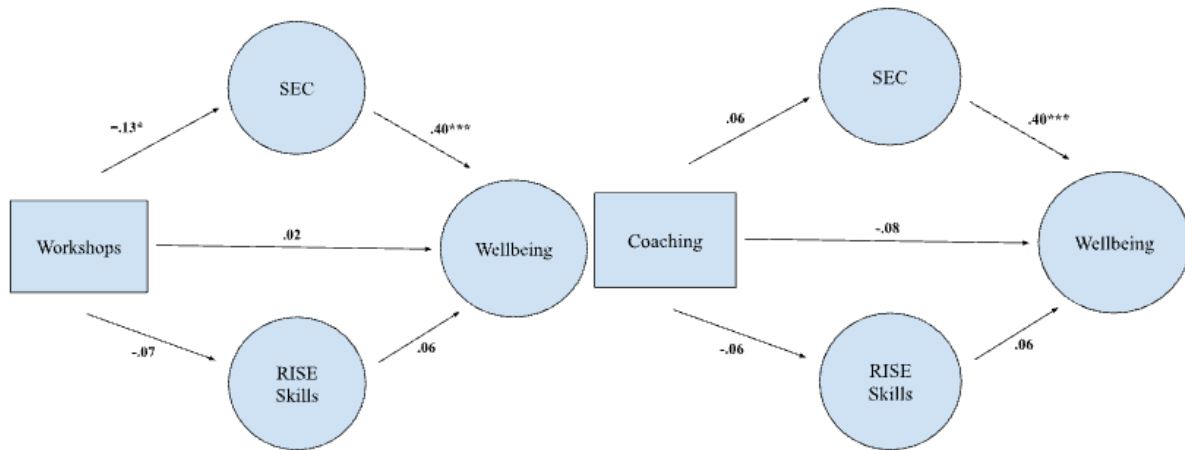


Figure 1

Note. This structural equation model predicts Educator Well-being from number of workshops and number of RISE coaching sessions, mediated by Educator Social Emotional Competencies and RISE Skills. Statistics are standardized regression coefficients.

+* $p < .05$ ** $p < .01$ *** $p < .001$

Together, Workshops, Coaching, Educator SEC and RISE Skills variables explained 16.3% of the variance within the model. Similarly, in this model, number of workshops ($b = 0.002$, $SE = 0.007$, $p > 0.05$) and number of coaching sessions ($b = -0.007$, $SE = 0.006$, $p > 0.05$) did not significantly predict educator well-being scores. The indirect effect of RISE Coaching on Educator Well-being through Educator SEC was nonsignificant ($b = 0.002$, $SE = 0.002$, $p > .05$). The indirect effect of number of workshops on educator well-being through RISE Skills was

nonsignificant ($b = -0.000$, $SE = 0.000$, $p > .05$). The indirect effect of number of workshops on educator well-being, through Educator SEC, was near-significant ($b = -0.006$, $SE = 0.003$, $p = .076$). Finally, the indirect effect of number of workshops on educator well-being through RISE Skills was nonsignificant ($b = -0.000$, $SE = 0.001$, $p > .05$). The total effect of number of coaching sessions on Educator Well-being was nonsignificant ($b = -0.005$, $SE = 0.006$, $p > .05$). The total effect of number of workshop sessions on Educator Well-being also was nonsignificant ($b = -0.004$, $SE = 0.008$, $p > .05$).

DISCUSSION

The main goals of this study were to confirm the underlying structure of the RISE logic model and to determine the direct and indirect associations between program dosage and the confirmed constructs. Regarding the first study hypothesis, results mostly confirmed the factor structure of the scales included in the RISE logic model. Confirming the factor structures indicates that the scales effectively capture the underlying constructs they were designed to measure. This demonstrates a solid foundation for accurately testing relations between study variables and allows for meaningful interpretation. Secondly, mediation analyses did not find significant direct effects from dosage to educator well-being or indirect effects mediated by educator SEC or RISE skills. Despite prior findings from other samples of significant associations between educator SEC, mindfulness skills, and well-being (Jennings et al., 2017; Roeser et al., 2013), this study did not find evidence for mediation among these constructs. The lack of significant direct and indirect effects in the mediation model suggests that the ways in which the RISE program affects these three constructs could be more nuanced than initially expected.

Confirming Factor Constructs within the RISE Logic Model

Consistent with previous research, the subscales used to measure the constructs within the RISE logic model were confirmed. These results suggest that the measures used to evaluate program outcome represent conceptually cohesive constructs. However, the way in which the subscales loaded onto each factor deviated from the patterns observed in prior programs. Two pilot studies conducted on directly comparable programs (e.g., CARE program and SMART program) to RISE both utilized the Maslach Burnout Inventory Educator Scale (MBI-ES) to assess levels of job-related burnout (Jennings et al., 2017; Roeser et al., 2013). Within these programs,

Roeser et al. (2013) combined the three subscales of the MBI-ES into a global measure of burn-out, whereas Jennings et al. (2017) utilized only the emotional exhaustion subscale within a broader factor of psychological distress. Alternatively, within the current study, only the depersonalization and emotional exhaustion subscales loaded onto the well-being factor and were used as the dependent variable in the final model. Therefore, the way that the MBI-ES subscales loaded onto the educator well-being factor in the current study might have altered the conceptual construct being assessed, potentially resulting in varied outcomes. This result may have implications for analyzing overall program effectiveness.

Dosage in Relation to Well-being

Previous evaluations of the RISE program demonstrated that there were significant pre-post changes in self-reported educator social emotional competencies, well-being, and emotion-focused relationship skills (Fitzgerald et al., 2021). However, in the current study, null direct effects between the number of workshops and coaching sessions attended and educator well-being demonstrated that these relationships were not associated with program dosage. This suggests that pretest-posttest gains found in previous studies are not due to program dosage. These findings are consistent with a recent review on SEL interventions for teachers that found dosage and cross-session training along with the use of mindfulness techniques did not predict the effects of SEL interventions (Oliveria et al., 2021).

Though prior research has established the overall positive impact of universal school-based SEL programs on social and emotional skills and well-being (CASEL, 2023), there is still very little knowledge around differential effectiveness. Differential effectiveness is the concept that certain groups or populations will benefit or gain more from an intervention than others, controlling for dosage (Rossi et al., 2018). This concept has implications for interpreting results

as it may appear that whole program effects were nonsignificant when in fact, they could be beneficial for subgroups (Macias et al., 2008). A possible contributor to the current null findings may stem from differential effectiveness associated with subgroups within the sample. Identification of these subgroups allows evaluators to understand who benefits from a program. This is important to consider when interpreting the dose-response relationships for the RISE program recipients that potential program effects for sample subgroups may be overshadowed by the null main effects of the program.

Another potential factor to consider is that solely comparing the intended dosage against the dosage received fails to account for the potential influence of fidelity and implementation quality on program outcomes (Berkel et al., 2011). Program fidelity (i.e., the extent to which a program is implemented as intended by program designers) is essential to understanding what parts of the program led to the effects found in impact evaluations (Rossi et al., 2018). High program fidelity is positively associated with increased likelihood of intended program outcomes (Cooper et al., 2019). Though previous research on the utilization of coaching sessions to assist teachers in implementing programs is still new, studies have found that they have been linked to higher fidelity (Stormont et al., 2013). However, past research has also demonstrated that without ongoing coaching, teachers' implementation fidelity reduces over time (Reinke et al., 2013). Overall, the average amount of coaching sessions participants received was 3.4 out of a total of 16. In general, a dose-response relationship implies that as the dosage of the program increases, the magnitude of the outcomes increases (Rossi et al., 2018). Without this knowledge, it is impossible to know why some participants are seeking out more dosage, especially individual coaching sessions. Therefore, it may be important for coaches to not only support those who

need more coaching sessions, but also provide coaching sessions to teachers who feel confident in their implementation, so skills do not decline after the initial workshops.

Finally, drawing from prior research on the association between program quality and participant responsiveness, Berkel et al. (2011) further suggested that program quality may moderate the relation between fidelity and outcomes. Therefore, it is possible that implementation quality in the coaching sessions could have an impact on participant responsiveness and how many coaching sessions they sought out. This in turn could affect the dosage received leading to the null program outcomes. Overall, assessing the amount of dosage received only provides part of the picture for why outcomes occur within prevention programs. Further evaluation is needed before determining the relationship between dosage received and educators' well-being within the RISE program.

Mediating Effects of Educator SEC and RISE Skills

Results did not support the hypothesis that the relation between program dosage and educator well-being would be mediated by participants' SEC and RISE skills. However, there was a negative near-significant indirect effect between the number of workshops and educator well-being mediated by participants' SEC. This could mean that those who had lower amounts of SEC attended more workshops overall than those with higher levels of SEC who attended fewer sessions. These relationships are consistent with the literature that increasing teachers' SEC leads to increases in well-being (Oliveira et al., 2021). Though challenging, it is important to separate indirect effects from overall program effects in order to support the underlying theory of the RISE logic model (Rossi et al., 2018).

In addition to dosage quality, there are other potential reasons for nonsignificant associations among study variables. First, ceiling effects for teacher well-being were found for some of

the subscales. Ceiling effects occur when participants score very high on pretest variables, leaving very little room to discern improvement from the program and the true extent of changes in outcomes cannot be determined (Wang & Zhang, 2009). Ceiling effects were present for the depersonalization, positive/negative affect, and personal accomplishment subscales that comprised the well-being construct. The highest score possible on the MBI-DP subscale was a one, meaning that the closer to one a person scores the less they experienced depersonalization. Scores for the MBI-DP subscale had very small changes from pre ($M = 1.78, SD = .81$) to post ($M = 1.96, SD = .90$) with high mean scores at baseline. Similarly, the highest score possible on the MBI-PA subscale was a seven, meaning that the closer to one a person scores the more they experienced personal accomplishment. There were high mean scores at baseline and minimal changes from pre ($M = 5.82, SD = .60$) to post ($M = 5.80, SD = .68$) test. The highest score on the PANAS Negative subscale was a one, meaning that the closer to one a person scores the less they experienced negative affect. Most participants scored high levels at baseline ($M = 1.96, SD = .61$) as well as at posttest ($M = 1.98, SD = .70$). This means that participants were starting the program with high levels of personal accomplishment and lower levels of burnout, which could be an important reason for the null effects on educator well-being found in the current study.

Another potential reason for the lack of significant effects is selection bias. Participants were not randomly assigned to the RISE program; instead, they volunteered to participate after a whole school professional development training on the RISE specific skills (Fitzgerald et al., 2021). Selection bias can typically occur when the aim of the intervention is to decrease the severity of a problem: in the case of the present study, educator burnout and attrition (Larelere et al., 2004). This can then make the intervention look less effective than it was. The motivations, interests, and values of the participants that chose to be part of the RISE program could have a

large influence how willing they are to participate in the program and learn skills (Larelere et al., 2004). That is, it is possible that those who needed the program the most (e.g., participants with the lowest levels of well-being) did not volunteer to participate in the program. Conversely, those who chose to participate in the program were motivated to learn the RISE Skills and build their SEC but might have participated for other reasons than to reduce the risk of burnout. This may suggest why there were ceiling effects and null program effects on educator well-being.

Finally, null effects could be influenced by the measures used to assess program outcomes. Though the RISE Questionnaire was adapted from a reliable and valid measure, it still requires further analysis on the modified version utilized within this study to determine if this new scale also meets these requirements (Fitzgerald et al., 2023). With this measure still requiring further evaluation, it is possible the subscales may not be measuring the intended constructs which could affect the relationships between the RISE Skills variables and program outcomes. As stated previously, with three out of the original five subscales loading onto the well-being construct, the overall construct might have been altered, potentially contributing to null program effects.

Limitations

This study's findings should be considered in light of study limitations. First, without the use of a comparison group, results are not able to infer causal relationships between constructs and conclusions about program impact are not possible. Without a comparison group there is no baseline to understand the changes that would happen without the program present and the confounding variables that may influence the intended outcomes (Rossi et al., 2018). Therefore, without a comparison group, it is difficult to know if the lack of program effects is due to program dosage itself or to other factors.

A second limitation is that only a single imputation was computed on the study data. Single imputation involves replacing missing values in a dataset with a single estimate (Jo, 2022). However, using only a single imputation can lead to biased results even when data are missing completely at random (Jo, 2022). Jo (2022) states that this is due to losing the variability in responses that comes with missing data. Best practice involves a multiple imputation method where data are imputed into a certain number of datasets, analyses are computed on each dataset, and then estimates from each dataset are pooled together (Jo, 2022). Therefore, using this method is the best way to obtain more accurate estimates.

A third study limitation is that despite longitudinal original data collection, only pre- and posttests were conducted. Therefore, without program follow-up results (e.g., three time points), temporal mediation cannot be accurately inferred, which is the most important way to validate the underlying programs theory of change (Rossi et al., 2018).

Finally, there was the inability to analyze subgroup differences due to the lack of demographic information collected (i.e., perhaps dosage was associated with positive outcomes for some subgroups and not others). Though RISE is a universal program aimed at providing SECs and skills for every adult within the school, program effects are rarely identical for all participants (Rossi et al., 2018). Determining important subgroups of the population would allow program developers to find ways to strengthen the program and increase the overall program effects.

FUTURE DIRECTIONS

Future recommendations for the RISE program include the need for enhancing the rigor of the experimental design to include comparison groups to be able to make stronger causal inferences of program effects. This would help program developers understand for whom the program is most beneficial and determine dose-response relationships that could lead to increases in positive outcomes. This knowledge would also be incredibly impactful for furthering research in the field of adult-focused school-based SEL interventions.

Second, there is value in process evaluations that include assessments of program fidelity (e.g., quality, and participant responsiveness). Though most participants attended more than five of the eight workshops, most participants received very few coaching sessions. These sessions were aimed at increasing participants' use of RISE Skills and managing classroom challenges. Due to the low number of coaching sessions received, future program developers could complete qualitative analyses to gauge how well the facilitators are implementing these coaching sessions and overall participant responsiveness. It could be impactful to collect data on the reasons why some teachers access more coaching sessions than others, as well as the reasons behind coaching decline during the school year. In addition, future cohorts of RISE could assess the impacts of coaching on educator's degree of implementation and later program outcomes by creating a coaching and non-coaching comparison group.

Finally, though previous interventions have assessed strategies for reducing educator burn-out, it might be that positive effects on well-being take longer to observe (Maslach et al., 2001). Therefore, it could be useful to find alternative measures that assess more proximal processes

such as changes in daily stress and self-efficacy to see if these constructs are more directly impacted by increases in participants' SEC and RISE skills.

CONCLUSION

Addressing educators' mental health and well-being has become imperative as more and more educators are leaving the field due to stress and burnout (Jennings & Greenburg 2009; Schonert-Reichl, 2017; Oliveira et al., 2021). Though there have been decades of research linking increases in social and emotional competencies to a myriad of positive outcomes in youth, there is still very little knowledge on the processes that underly adult focused SEL programs (Fitzgerald et al., 2021). Utilizing mediation analyses to understanding dose-response relationships are still rare in SEL outcome research making teasing apart specific program outcomes and confirming a program's underlying theory very difficult (Durlak et al., 2022). Therefore, to better understand how these processes drive changes in adult focused SEL programs, this study evaluated the Resilience in Schools and Educator's program, a universal adult focused SEL program (Fitzgerald et al., 2021). Results demonstrated that no direct associations were found between program dosage and educator well-being and that there were no indirect associations between dosage and well-being mediated by educators' SEC or RISE skills. Future directions for the evaluation of the RISE Program include the use of comparison groups, collection of detailed fidelity assessments to determine differential effectiveness and dose-response relationships, testing more proximal outcomes such as job stress to gain a deeper understanding of the processes through which the intervention operates, and testing for whom RISE is most beneficial. A better understanding of each of these issues may contribute to a more effective and efficient RISE Program.

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