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To cite this article: Brendan A. Rich, Nina D. Shiffrin, Colleen M. Cummings, Melissa M. Zarger, Lisa Berghorst & Mary K. Alvord (2019) Resilience-Based Intervention with Underserved Children: Impact on Self-Regulation in a Randomized Clinical Trial in Schools, *International Journal of Group Psychotherapy*, 69:1, 30-53, DOI: [10.1080/00207284.2018.1479187](https://doi.org/10.1080/00207284.2018.1479187)

To link to this article: <https://doi.org/10.1080/00207284.2018.1479187>



Published online: 11 Jul 2018.



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Resilience-Based Intervention with Underserved Children: Impact on Self-Regulation in a Randomized Clinical Trial in Schools

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ABSTRACT

Resilience and emotion regulation are crucial for optimal psychosocial functioning in children. This study assessed whether a group-based intervention, the Resilience Builder Program (RBP), improved student report of emotion regulation when administered in elementary schools. Sixty-seven students aged 9–12 years ($M = 10.50$, $SD = .74$; 82.1% male, 98.5% ethnic/racial minority) were randomly assigned to receive the

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RBP intervention immediately or following a semester delay. Participants reported their emotional control using the How I Feel scale. Students who received the RBP reported a significant increase in their emotional control and a significant decrease in negative emotion compared to those students in the delayed treatment sample who had not yet received the intervention. Further, students indicated a strongly positive perception of the therapy.

INTRODUCTION

Nearly 20% of children and adolescents meet criteria for a mental health disorder, yet only 25% of these children receive the care that they need (Waddell, McEwan, Shepherd, Offord, & Hua, 2005). The provision of mental health services to the greatest number of youth may be best accomplished by providing group therapy in the school setting. Indeed, a number of studies have found group treatments in the school setting to be efficacious (Borders & Drury, 1992; Gerrity & DeLucia-Waack, 2007; Hoag & Burlingame, 1997). The administration of group therapy in the school setting may be of particular benefit in low-socioeconomic-status (low-SES) communities that traditionally lack access to therapy. This study discusses efforts to implement a resilience-based group therapy with ethnic/racial minority youth in underserved communities, with a focus on improving emotion regulation skills.

Resilience skills enable individuals to effectively cope with and adjust to life's challenges, including social struggles, environmental stressors, and mental illness (Alvord & Grados, 2005; Masten & Wright, 2009). Resilient individuals display social competence: the ability to integrate behavioral, cognitive, and affective skills successfully in social contexts (Bierman & Welsh, 2000). Childhood resilience is associated with numerous positive outcomes, including fewer behavior problems, better peer relationships, improved mood, and better family functioning (Hjemdal, Aune, Reinfjell, Stiles, & Friborg, 2007; Kim & Yoo, 2010; Martel et al., 2007; Masten, Best, & Garmezy, 1990; Naglieri, Goldstein, & LeBuffe, 2010; Werner, 2004). Importantly, research demonstrates that resilience can be taught

and learned (Alvord & Grados, 2005; Alvord, Rich, & Berghorst, 2016; Masten, 2001; Richaud, 2013).

Resilience skills include self-regulation of emotion and behavior (e.g., appropriately modulating attention, mood, and actions), a proactive orientation (e.g., taking initiative, self-confidence), and adaptability (e.g., being flexible in one's behavioral and cognitive responses). For the purposes of this article, we focus specifically on self-regulation of emotion, hereafter referred to as emotional control or emotion regulation.

Emotion regulation is defined as “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). Emotion regulation can include controlling both negative and positive emotions (Tugade & Fredrickson, 2006). Emotion regulation in childhood is associated with a wide range of positive outcomes, including decreased internalizing symptoms and improved behavioral functioning (Thomson, Burnham Riosa, & Weiss, 2015). Young children who exhibit emotion regulation have more adaptive social skills and are viewed more favorably by their peers (Nakamichi, 2017). The ability to regulate emotions is also associated with academic engagement, which, in turn, predicts academic achievement (Kuhnle, Hofer, & Killian, 2012; Kwon, Hanrahan, & Kupzyk, 2017).

The links between emotion regulation and positive psychosocial outcomes highlight the importance of youth interventions that include emotion regulation as a therapeutic target. A meta-analysis noted the efficacy of school-based social and emotional learning (SEL) programs that include emotion regulation in their curriculum (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Overall, these interventions lead to enhanced positive social behaviors, reduced emotional distress, and reduced conduct problems. However, these are universal programs administered to entire classrooms or schools, rather than targeting youth most in need of therapeutic services.

To date, there is limited research on the efficacy of interventions that target emotion regulation with children who are ethnic/racial minorities and from low-SES communities. Minority youth from low-SES communities receive disproportionately low rates of mental health services, often due to barriers including limited

access to mental health providers, low rates of insurance, and limited access to transportation (Sanchez, Chapa, Ybarra, & Martinez, 2014). Administering interventions in schools may best address these barriers. Specifically, school implementation may provide ready access, eliminate transportation needs, facilitate the identification of children in need of further services, and include school staff members who could potentially administer interventions (Kratochwill & Shernoff, 2003). Further, group therapy may be the ideal mechanism for delivering therapeutic services, given that it can reach the greatest number of students with the least requirement of staff resources. Unfortunately, understanding of school-based group interventions administered to low-SES minority students is limited. In the meta-analysis by Durlak et al. (2011), nearly one-third of studies failed to report student ethnicity or SES, and these populations were underrepresented in the rest of the studies. Consistent with this, another meta-analysis noted, “Resilience-focused interventions seem to exclude the very people who might need them the most” (Hart et al., 2014, p. 410). Hence, more studies are needed to explore the efficacy of resilience-based interventions with underserved youth in school settings.

The current study attempts to address this research gap by examining the Resilience Builder Program®, a manualized group therapy program to help children build social competence and emotion regulation skills (Alvord, Rich, & Berghorst, 2014; Alvord, Zucker, & Grados, 2011). A naturalistic study conducted in an outpatient therapy practice provides preliminary empirical support for the effectiveness of the RBP group therapy in improving children’s emotion regulation, as measured by child-report on the How I Feel Scale (HIF; Walden, Harris, & Catron, 2003). Following participation in the RBP, analyses indicated significant increases in emotion control (Aduen et al., 2014; Habayeb, Rich, & Alvord, 2017), and significant reductions in negative emotionality (Aduen et al., 2014), in youth with an autism spectrum disorder (ASD) diagnosis. Youth with an anxiety disorder reported significant improvements in emotion control and positive emotionality, along with reduced negative emotionality, following the RBP (Watson, Rich, Sanchez, O’Brien, & Alvord, 2014).

Findings to date regarding the impact of RBP are promising but were based on a high-SES, primarily White sample in private outpatient therapy practice. Further, these results reflect within-group analyses with no comparison group to control for the chance that participants might improve over time without intervention. The current study attempted to address these research gaps by conducting a randomized controlled trial of the effectiveness of the RBP when administered to underserved youth in the school setting. Further, the majority of participants were referred for therapy as they presented with prominent social, behavioral, and emotional deficits. We targeted changes in emotion regulation and positive and negative emotionality, given their central role in social competence and academic functioning. Based on our prior studies of the RBP, we predicted that students who received the treatment immediately would demonstrate significantly greater improvements in emotional control, reductions in negative emotions, and increases in positive emotions, compared to students who were in the delay group and had not yet received the intervention. The current study also examined the acceptability of the intervention in an effort to examine whether the RBP is a candidate for increased dissemination. We predicted that students would evaluate the RBP positively.

METHODS

Participants

Participants were 67 students aged 9–12 years old ($M = 10.50$, $SD = .74$), recruited from three schools in the greater Washington, DC, area. These schools serve primarily racial/ethnic minority students from low-SES families: On average, 73% of the students at these schools participate in the National School Lunch Program (NSLP) that provides free and reduced meal services. Students were in grades 4 through 6. Of these students, 77.6% identified as African-American, 17.9% identified as Hispanic, 3.0% identified as biracial, and 1.5% identified as White; 82.1% of students identified as male. Parents reported family income as follows: 42.1% earned \$25,000–\$49,999, 33.3% earned less than \$25,000, and 14.0% earned \$50,000–\$74,999. Of all students in the group, 46.7% lived with both biological parents

and 33.3% lived with one biological parent. Forty-eight children (71.64%) were referred for the RBP by teachers, mental health providers, and administrators who identified the youth as having psychosocial deficits. However, no specific diagnoses were required to participate, and participants could be receiving concurrent psychopharmacological or psychological treatment. Another 19 children (28.36%) were enrolled one semester when a school requested that we enroll the entire fifth grade because the school felt all students would benefit from participation. Although the entire grade was selected to participate, all participants were randomly assigned to immediate or delayed treatment. For the entire sample, exclusionary criteria included having a psychotic disorder, a substance use disorder, and/or moderate to severe autism spectrum disorder, because the RBP was not designed for these clinical issues.

Students were randomly assigned for immediate treatment ($n = 38$) or delayed treatment ($n = 29$). A comparison of the RBP and delayed treatment samples found no differences in age, $t(1,67) = 1.15$, $p = 0.26$, gender, $\chi^2(1,67) = 0.71$, $p = 0.40$, race/ethnicity, $\chi^2(3,67) = 3.16$, $p = 0.37$, family living situation, $\chi^2(6,67) = 6.84$, $p = 0.34$, or family income, $\chi^2(5,67) = 2.71$, $p = 0.75$ (see Table 1). There were no

Table 1. Demographic and clinical data.

	Total sample ($N = 67$)	RBP ($n = 38$)	Delayed ($n = 29$)	p Value
Sex (% male)	82.1	86.8	75.9	0.40
Average age (years)	10.50 \pm 0.74	10.59 \pm .72	10.38 \pm .78	0.26
Ethnicity, % (n)				0.37
White	1.5 (1)	0 (0)	3.4 (1)	
Biracial	3.0 (2)	2.6 (1)	3.4 (1)	
African American	77.6 (52)	73.7 (28)	82.8 (24)	
Hispanic	17.9 (12)	23.7 (9)	10.3 (3)	
Annual family income				0.75
Less than \$25,000	33.3% (13)	25.0 (8)	20.0 (5)	
\$25,000–\$49,999	42.1% (24)	46.9 (15)	36.0 (9)	
\$50,000–\$74,999	14.0% (8)	12.5 (4)	16.0 (4)	
Family living situation				0.34
Lives with both biological parents	46.7 (28)	46.9 (15)	46.4 (13)	
Lives with one biological parent	33.3 (20)	25.0 (8)	42.9 (12)	

differences in pretherapy HIF scores between youth referred to us by school personnel and youth who were enrolled when an entire fifth grade was targeted (HIF positive emotion $t(1,53) = -1.14$, $p = 0.26$; HIF negative emotion $t(1,53) = -0.09$, $p = 0.93$; HIF emotion control $t(1,53) = -0.88$, $p = 0.38$).

Procedures

School officials first contacted families to inform them of their child's eligibility for the RBP study. Once families expressed an interest, they were contacted by school personnel or researchers and invited to attend an informational session, at which they were given details about the study. If interested, they provided signed consent. Because of the minimal risk of the project, in-person consent was not deemed necessary, provided that parents were given the opportunity to speak with a researcher to have their questions answered. All study procedures were approved by a Committee for the Protection of Human Subjects.

Once consent was obtained, youth were randomly assigned to an immediate treatment or delayed treatment sample. Youth in the immediate treatment sample began the RBP that semester. The delayed treatment sample served as our control group, allowing us to examine whether changes in reported emotion regulation were due to the intervention rather than the mere passage of time. The data presented in this article compare children who did the RBP immediately with those in the delayed group prior to their participation in the RBP.

The RBP is comprised of twelve 1-hour sessions (with approximately six children per group). Each session involves the following underlying framework: interactive didactic component, free play, behavioral rehearsal, and a self-regulation exercise. Examples of didactic topics included leadership, personal space, initiating and maintaining conversations, and stress management. Between sessions, the RBP emphasizes skill generalization through weekly assignments for children to practice the skills learned in the natural home and school environments, and a success journal for children to describe their efforts to use skills. Parents/guardians are given weekly letters that review each session's skills and provide strategies to generalize these skills through

practice at home during the week. Each group had four to six children, consistent with recommendations for elementary-aged youth (Berg, Landreth, & Fall, 2006). Further, groups were comprised of children from the same grade to be sensitive to developmental considerations (Falco & Bauman, 2014).

Participants receiving the treatment immediately and those in the delayed sample completed the assessment measures at baseline (Time 1) and immediately following the completion of the first semester of the 12-week intervention (Time 2). The battery of measures was completed by the child, a parent, and a teacher, and questionnaires assessed broad domains of psychosocial functioning and academic engagement. For the purposes of this study, we analyzed a subset of our larger assessment battery to focus on child self-report using the following questionnaires.

How I Feel Scale (HIF; Walden et al., 2003). Completed by the child, the HIF measures emotion arousal and control. It is comprised of 30 items that a child answers on a 5-point Likert scale from *not at all true of me* to *very true of me*. The items assess the frequency of experiencing various positive emotions (e.g., “I was happy very often,” “When I felt excited, my excited feelings were very strong”), and negative emotions (e.g., “When I felt sad, my sad feelings were very strong,” “I was scared almost all the time”), along with the child’s self-report of his or her ability to regulate his or her emotional response (e.g., “I was in control of how often I felt mad,” “When I felt sad, I could control or change how sad I felt”). This measure yields a total score and three subscales: Positive Emotions, Negative Emotions, and Emotional Control. Strong psychometric properties include internal consistency (0.84–0.90), test–retest reliability (0.37–0.63), goodness of fit (0.94–0.99), and concurrent validity with measures of mood, emotional self-efficacy, self-regulation, and even social status (0.80’s), (Ciucci, Baroncelli, Grazzani, Ornaghi, & Caprin, 2016; Kim, Walden, Harris, Karrass, & Catron, 2007; Walden et al., 2003)

Demographic Questionnaire. The demographic questionnaire was completed by parents. It provides basic demographic information about age, gender, ethnicity/race, SES (i.e., annual family income), and family composition (i.e., whether child lived with both biological

parents, one biological parent, or another combination of step-parents and/or guardians).

Group Satisfaction Questionnaire. This child self-report provides a measure of the child's perception of group acceptability. The measure consists of questions that use a Likert scale ranging from *very* to *not at all* that ask "How satisfied are you with group topics?," "I learned helpful skills," "I use the new skills I learned," "The resilience builder homework was helpful," and "Would you recommend this group to others?" The measure also included open-ended free response questions that asked "The most helpful things I learned from group were . . .," "What did you like best about the groups?," and "What did you like least about the groups?" The questionnaire was labeled using the child's subject identification number to ensure anonymity.

RESULTS

Data-Analytic Plan

Analyses followed an intent-to-treat approach in that all students who were enrolled in the study and randomized were included in analyses (Gupta, 2011), with the exception of missing data noted in the following. All participants who were randomized completed their course of intervention. Missing data do not reflect participant dropout and are discussed in the following. Analyses were conducted for the three subscales of the How I Feel (HIF) measure of emotion regulation using analysis of covariance (ANCOVA). For variables assessed repeatedly, time was entered as a within subject factor, intervention status (immediate vs. delayed) was entered as a between-subject factor, and school was entered as a random factor covariate.

Preliminary Analyses. Of the 67 participants, 48 provided both Time 1 and Time 2 data on the HIF measure (31 in the RBP sample, 17 in the delayed treatment sample). Of the 19 who failed to provide complete HIF data, six were missing both the Time 1 and Time 2 data, six were missing Time 1 data but turned in Time 2 data, and seven turned in Time 1 data but were missing Time 2 data. Missing data did not reflect participant

dropout; rather, it reflected students who completed the program but did not complete select measures due to being absent the day of data collection and/or not returning forms completed outside of school. A comparison of those who provided HIF data at both time points to those who were missing data for at least one time point found that the groups did not differ in age, $t(1,67) = 0.54$, $p = 0.59$, gender, $\chi^2(1,67) = 2.20$, $p = 0.14$, race/ethnicity, $\chi^2(1,67) = 1.34$, $p = 0.72$, school, $\chi^2(1,67) = 0.25$, $p = 0.62$, or Time 1 functioning on the HIF positive emotions, $t(1,53) = 1.19$, $p = 0.24$, HIF negative emotions, $t(1,53) = -0.08$, $p = 0.94$, and HIF emotion control, $t(1,53) = -0.20$, $p = 0.84$, subscales. Given these results, and controversy related to substituting missing data (Kang, 2013), participants missing HIF data were excluded from subsequent ANCOVAs. Finally, a power analysis using the G*Power program (Faul, Erdfelder, Buchner, & Lang, 2009) indicated that in order to detect a medium-sized effect of 0.5 when employing the traditional .05 criterion of statistical significance, a minimum sample size of 14 per group (28 total) would be required, indicating that our sample of 48 (31 in the RBP sample, 17 in the delayed treatment sample) on the HIF was sufficient for our planned analyses (Glueck & Muller, 2003).

Dependent variables were assessed for normality of distribution and interrelationship between variables. Scores on the six subscales from the HIF (i.e., Time 1 and Time 2 for positive emotions, negative emotions, and emotion control) did not violate assumptions for normality of distribution using the Shapiro–Wilk test (p 's = 0.13–0.29) or Mauchly's test of sphericity ($\chi^2(2) = 4.05$, $p = 0.54$). Levene's test of equality of error was nonsignificant (p 's = 0.14–0.87), suggesting that despite the differences in sample size between the RBP ($n = 38$) and delayed treatment groups ($n = 29$), analyses did not violate homogeneity of variance.

RBP therapy outcome. The time \times group interaction for HIF negative emotions was significant, $F(1,46) = 47.14$, $p < 0.001$. Post hoc comparisons found that although the RBP and delayed treatment groups did not differ before the onset of therapy at Time 1 ($t(53) = 0.51$, $p = 0.61$), the groups did differ after RBP treatment at Time 2 ($t(52) = -2.63$, $p = 0.01$), with the RBP sample having significantly lower negative emotionality than the delayed treatment sample (see Figure 1). Further, although students in the RBP treatment sample displayed

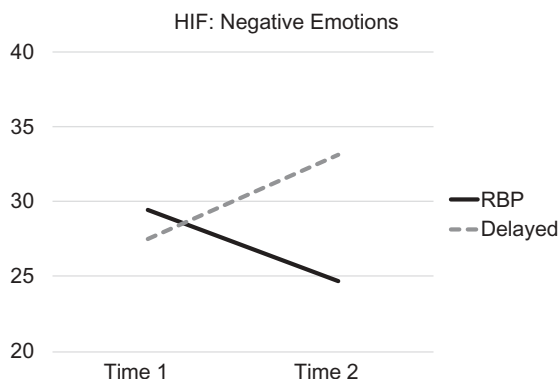


Figure 1. Changes in HIF Negative Emotions scores following participation in the Resilience Builder Program. HIF = How I Feel; RBP = Resilience Builder Program sample; Delayed = delayed treatment comparison sample.

significant reductions in negative emotions from Time 1 to Time 2 ($t(30) = 4.33, p < 0.001$), students in the delayed treatment sample displayed significant increases in negative emotions from Time 1 to Time 2 ($t(16) = -6.40, p < 0.001$).

The time \times group interaction for HIF emotional control was significant: $F(1,46) = 11.33, p = 0.002$. Post hoc comparisons found that although the RBP and delayed treatment groups did not differ before the onset of therapy at Time 1 ($t(53) = 0.77, p = 0.48$), the groups did differ after RBP treatment at Time 2 ($t(52) = 4.87, p < 0.001$), with the RBP sample reporting significantly greater emotional control than the delayed treatment sample (see Figure 2). Further, although students in the RBP treatment sample displayed significant improvements in emotional control from Time 1 to Time 2 ($t(30) = -2.48, p < 0.02$), students in the delayed treatment sample displayed significant decreases in emotional control from Time 1 to Time 2 ($t(16) = 2.80, p = 0.01$).

The time \times group interaction was nonsignificant for HIF positive emotions: $F(1,46) = 0.06, p = 0.81$).

Acceptability of RBP. Students completed the Group Satisfaction Questionnaire to determine their views on the acceptability of the RBP. Due to errors in administration and collection of questionnaire packets, a subset of students ($N = 42$) completed this measure. To the

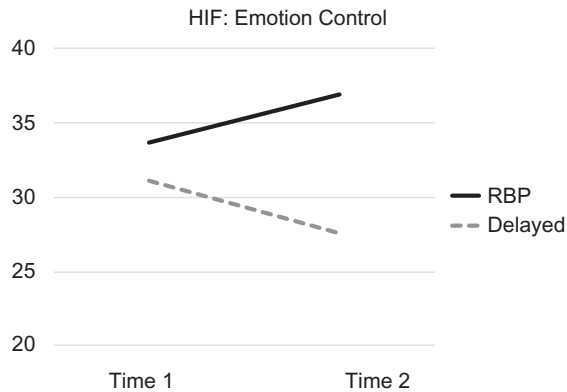


Figure 2. Changes in HIF Emotion Control scores following participation in the Resilience Builder Program. HIF = How I Feel; RBP = Resilience Builder Program sample; Delayed = delayed treatment comparison sample.

question “How satisfied are you with group topics?,” 69% responded *very* or *a lot* (see Figure 3). To the question “I learned helpful skills,” 93% responded *very* or *a lot* (see Figure 4). To the question “I use the new skills I learned,” 69% responded *very* or *a lot* (see Figure 5). To the question “The resilience builder homework was helpful,” 74% responded *very* or *a lot* (see Figure 6). Finally, to the question “Would you recommend this group to others?,” 98% responded “yes,” while 2% responded “no.” Free response answers were sought to the question “The most helpful things I learned from group were . . .” Interestingly, in line with our analysis of outcome data, most responses alluded to improved regulation skills, including “I learned to control my anger,” “To calm myself down,” “How to deal with stress and anger,” and “To not react without thinking of the consequences.”

DISCUSSION

This study examined the effectiveness of the Resilience Builder Program® on child self-report of emotion regulation and positive and negative emotionality, when administered in a school setting with underserved youth. The current study is the first randomized controlled trial of the RBP and also reflects efforts to transport the RBP to diverse school settings to determine whether it may be an

How Satisfied Are You With Group Topics?

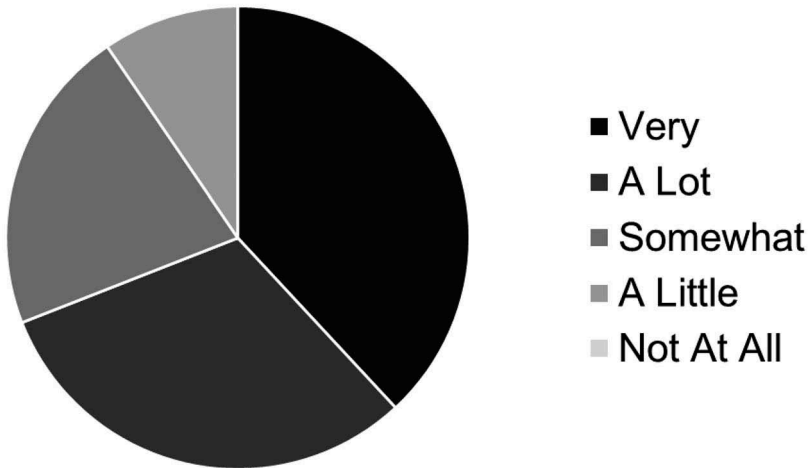


Figure 3. Results of group satisfaction questionnaire following completion of the Resilience Builder Program: satisfaction with group topics.

appropriate candidate for wider dissemination across school settings with underserved youth.

Results indicate that, as hypothesized, compared to children in the delayed treatment comparison sample, children who received the RBP intervention reported significant gains in emotion regulation and significant reductions in negative emotions. In fact, children in the delayed treatment comparison sample reported significant decreases in emotion regulation and significant increases in negative emotions. Thus, results indicate that the RBP improves functioning in these domains and may mitigate the risk for continued worsening of emotional functioning. No change was noted regarding positive emotions.

Emotion regulation is a critical skill for positive youth development. It is associated with a number of positive psychosocial outcomes, including decreased internalizing symptoms, improved behavioral

I Learned Helpful Skills

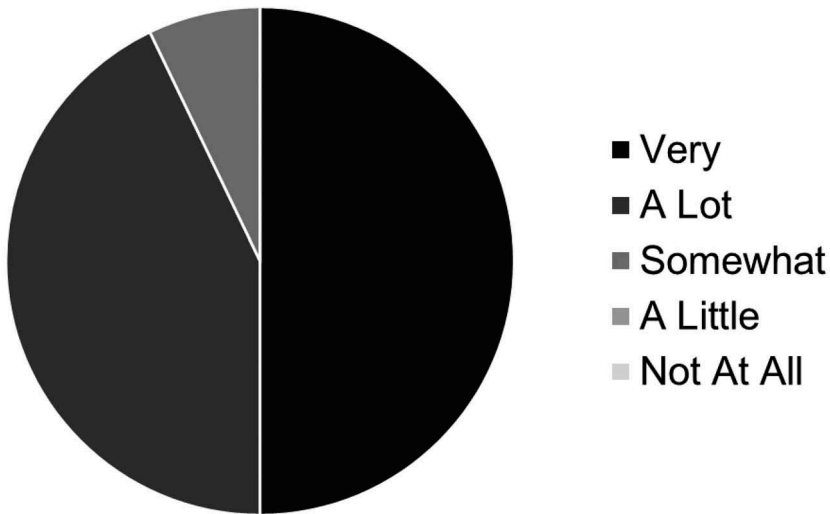


Figure 4. Results of group satisfaction questionnaire following completion of the Resilience Builder Program: helpful skills learned.

functioning, more adaptive social skills, and positive academic outcomes, including improved school grades (Kuhnle et al., 2012; Thomson et al., 2015). Our results suggest that the RBP may be an intervention capable of promoting emotion regulation strategies and reducing negative emotionality in underserved youth.

Our findings of improved emotion regulation and decreased negative emotions are consistent with prior results when the RBP was implemented in a private clinical setting with youth with anxiety and high-functioning autism (Aduen et al., 2014; Habayeb et al., 2017; Watson et al., 2014). Of note, those youth were primarily White children and from high-SES families. Therefore, in combination with prior research, the current study indicates that the RBP is an efficacious intervention for improving emotion regulation and reducing negative emotions independent of clinical setting, child race/ethnicity, and SES.

I Use The New Skills I Learned

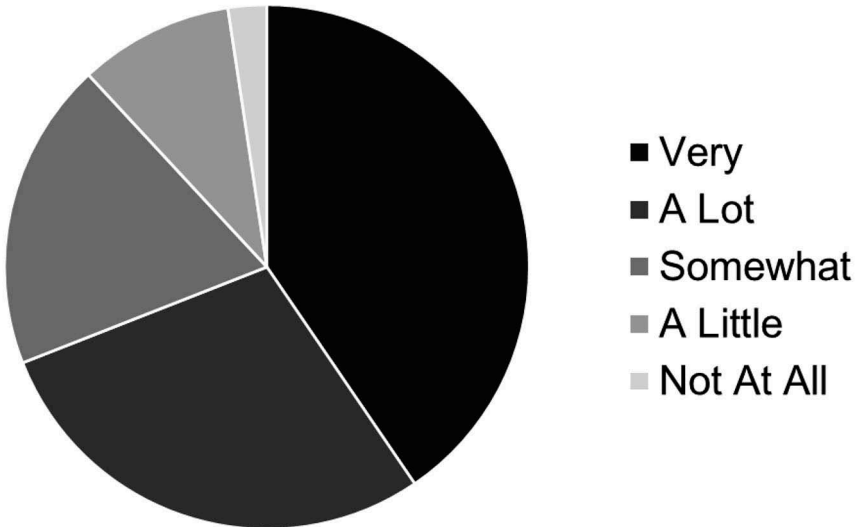


Figure 5. Results of group satisfaction questionnaire following completion of the Resilience Builder Program: use of new skills learned.

Contrary to hypotheses, there was not a significant increase in positive emotions in children who completed the RBP. These results are consistent with prior studies conducted in the private clinical setting with children with autism and overall social impairments, independent of diagnosis. The exception to these null findings is in youth with anxiety disorders, who displayed significant improvement in positive emotions following the RBP (Watson et al., 2014). It is notable that the current sample of children seen in the school setting generally lacked prominent anxiety: Only one participant had a reported anxiety diagnosis. Why might the RBP improve positive emotions only among anxious children? It is possible that as they experience symptom relief, anxious children reduce their avoidance, a construct uniquely associated with anxiety. In doing so, they may be able to increasingly engage in enjoyable experiences, thereby increasing positive emotional experiences. Further research on this topic is needed.

The Resilience Builder Homework Was Helpful

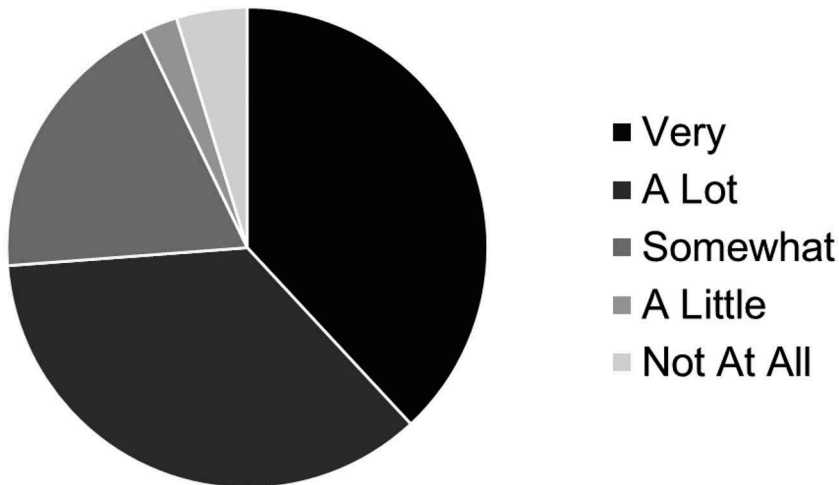


Figure 6. Results of group satisfaction questionnaire following completion of the Resilience Builder Program: helpfulness of homework.

The fact that few anxious youth were identified by school personnel as most in need of intervention for psychosocial difficulties is interesting. Prior studies find that school personnel have difficulty identifying internalizing disorders (Cunningham & Suldo, 2014; Herbert, Crittenden, & Dalrymple, 2004; Loades & Mastroyannopoulou, 2010; Papandrea & Winefield, 2011). Further, research finds that ethnic/racial minority youth are less likely than their White peers to be identified as having an anxiety disorder (Nguyen, Huang, Arganza, & Liao, 2007). These results highlight the need to address these referral biases when collaborating with school personnel to ensure that youth whose psychosocial difficulties stem from shyness, withdrawal, and avoidance receive adequate therapeutic care.

In addition to examining the impact of the RBP on emotion regulation, this study examined the acceptability of the intervention according to participant report. Overall, our results provide preliminary support for the acceptability of the RBP in underserved youth.

Specifically, 98% of respondents reported that they would recommend the RBP to their classmates. As children can sometimes be reluctant to receive psychotherapy, or may not believe that they require or would benefit from treatment (De Los Reyes & Kazdin, 2005; Dew-Reeves & Athay, 2012; Kendall, 2000), this very positive response to the RBP is an encouraging indicator of the acceptability of the RBP. In addition, participants overwhelmingly reported that they were satisfied with the topics of group sessions, learned new skills that they found helpful, and used these new skills. Given that child engagement and motivation in therapy are strong predictors of therapy success (Adelman, Kaser-Boyd, & Taylor, 1984; Wergeland et al., 2015), our results indicate that this common barrier to treatment efficacy may not be salient when administering the RBP. Finally, prior research finds that failure to achieve generalization of skills from the therapeutic environment to the child's home and school environment is a primary limitation of group psychotherapy (Barry et al., 2003; Rao, Beidel, & Murray, 2008). The fact that children in our study overwhelmingly reported having already enacted the skills they learned through the RBP at home and school indicates that the RBP may indeed promote generalization of skills, thus enhancing the ecological validity of this intervention.

There are several limitations to the current study. Our smaller sample size prevented analyses that would have allowed for nesting within important variables, such as the particular school. We attempted to address this by including school setting as a covariate in our analyses, but a larger sample size will allow for more comprehensive statistical approaches. Further, missing data meant that certain students were omitted from analyses. Assessment of regulation and emotionality relied entirely on student report. It is possible that different results would have been found had we examined parent and/or teacher report. On balance, given that emotions are internal experiences, child report seems most appropriate. However, assessment of outcome utilized just two measures, one of which was created for the purposes of this study. An expanded assessment of outcome using a greater number of standard measures and from additional informants (i.e., parent and teacher) is currently ongoing to confirm the changes reported in this study. Further, child self-report of outcome was assessed only at termination. It is possible that the positive

appraisal of functioning and participant satisfaction by those receiving the RBP reflects a biased positive “halo effect.” In addition, by assessing outcome only at termination, it is unknown whether treatment gains were maintained over time. Longitudinal assessment is needed to fully evaluate treatment efficacy. Also, for the purposes of the current study, the RBP was administered in the school setting by licensed psychologists and graduate students who were highly trained in the intervention. Future efforts to train school personnel to administer the RBP in school settings are needed to provide a more sustainable intervention. Finally, recruitment for the current study was inconsistent, as a subsample included an entire fifth-grade class. It is possible that this broader recruitment may have diluted the strengths of our findings. However, we note that randomized assignment of this entire class to the immediate and delayed treatment groups was still enacted. This highlights the complexity of doing research in community settings, such as schools, rather than more heavily controlled research settings.

In sum, this study documents that participation in the Resilience Builder Program® in the school setting leads to a significant improvement in emotion regulation and reduction of negative emotions in underserved youth. In addition, preliminary acceptability data found that these children had very positive opinions of the RBP and would recommend the intervention to their peers. Racial/ethnic minority children from low-income families often lack access to mental health services and thus are at disproportionate risk for their mental health needs being untreated (Merikangas et al., 2011; Saloner, Carson, & Le Cook, 2014). Enacting interventions in the school setting is an optimal and common way to address barriers to treatment access (Farmer, Burns, Phillips, Angold, & Costello, 2003; Green et al., 2013; Hoagwood & Johnson, 2003). The results of the current study provide initial evidence that the RBP may be an ideal group intervention to administer in schools for underserved youth.

ACKNOWLEDGMENTS

The authors thank the families who participated in this study, and the school counselors, psychologists, teachers, and administrators who provided invaluable assistance.

FUNDING

This research was supported in part by funding from the Group Foundation for Advancing Mental Health.

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