ASSESSING THE EFFECTS OF SCHOOL-WIDE SECOND STEP IMPLEMENTATION IN A PREDOMINATELY ENGLISH LANGUAGE LEARNER, LOW SES, LATINO SAMPLE

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Because school violence is widespread, social and emotional competence must be targeted. Second Step is a social and emotional violence-prevention curriculum that teaches prosocial skills and reduces aggressive behavior. The purpose of this study was to examine the effects of Second Step implementation on students (N = 403) in preschool through fourth grade who were predominately Latino, English language learners, and from families with low socioeconomic status. The data of 165 out of the 403 students were included in the present study. Analyses consisted of paired-samples t-tests to identify changes in social and emotional knowledge and behavioral and emotional risk. Results showed that there was a significant increase in both social and emotional knowledge and behavioral and emotional risk following the implementation of Second Step. These results are discussed with regard to previous and future research, limitations, and implications for school practice. © 2012 Wiley Periodicals, Inc.

School violence is widespread and occurs in many forms, including bullying, suicide, weapon possession, and sexual harassment (Eisenbraun, 2007). For example, 25% of public schools in the United States indicated that students were bullied on a daily or weekly basis in the 2007–2008 school year, and 85% of schools indicated that one or more crime-related incidents had occurred at school, amounting to approximately 2 million crimes that year (Dinkes, Kemp, Baum, & Snyder, 2009). There are both short- and long-term consequences of school violence, with significant relations between physical aggression in middle childhood and school dropout (Kokko, Tremblay, Lacourse, Nagin, & Vitaro, 2006), as well as between bullying behavior in males and low levels of empathy (Gini, Albiero, Benelli, & Altoè, 2007). Because school violence is a pervasive problem that has increased over the past two decades (Benedek & Kambam, 2008; Furlong & Morrison, 2000), further attention to school-wide prevention efforts to reduce youth violence and antisocial behaviors are warranted.

Traditionally, various forms of punishment are used to deal with problem behavior (e.g., suspension and office discipline referrals); however, research has shown that there is little evidence to support the effectiveness of such practices (Skiba & Peterson, 2000; Sprague et al., 2001). Sprague and colleagues (2001) indicated that these forms of punishment may actually lead to an increase in problem behavior, including harassment and intimidation. School practices that prevent discipline problems have been recommended as an alternative to traditional punishment paradigms and have been shown to increase positive behavioral and academic outcomes (Sugai & Horner, 2006).

SOCIAL AND EMOTIONAL LEARNING

One conceptual framework that aims to promote a positive school environment and decrease school violence is social and emotional learning (SEL). SEL is defined as “the process through which we learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behaviors” (Zins, Bloodworth, Weissberg, & Walberg, 2004, p. 4). Prevention methods within this framework include: a) teaching children to apply SEL skills in their daily lives in the classroom, school, and community; b) developing relationships between students and adults (school-based staff and parents); and c)
rewarding and encouraging positive behavior through school, family, and community system efforts (Greenberg et al., 2003). A proactive approach to discipline through school-wide systems is therefore encouraged through this framework, with interventions that address student mental health and teach students to solve academic problems and interpersonal conflicts (Doll & Cummings, 2008; Osher, Dwyer, Jimerson, & Brown, 2011). SEL curriculums are intended for all students in a school-wide approach and also more specifically for students at risk for negative social and emotional outcomes. Research reveals that teaching SEL within the school leads to a stronger sense of school community, increased prosocial and decreased antisocial behavior, improvements in grades and achievement, and decreases in anxiety and depression (Osher et al., 2008).

**SECOND STEP: PROGRAM DESCRIPTION AND EMPIRICAL SUPPORT**

An SEL curriculum that has been widely implemented is *Second Step* (Committee for Children, 2011). *Second Step* is a violence prevention curriculum for students in preschool through ninth grade that is designed to teach prosocial skills and reduce impulsive and aggressive behavior (Fitzgerald & Edstrom, 2011). The program focuses on three units (Empathy Training, Impulse Control and Problem Solving, and Anger Management), with approximately five to nine lessons per unit being taught one to two times per week. These units focus on skills such as identifying feelings, perspective taking, anger-reduction techniques, and problem-solving strategies. Each lesson typically starts by introducing a weekly concept (e.g., how to stay calm) and presenting a story using videos, story cards, and/or sample discussion questions. The specific skill is modeled by the adult teaching the program, and the students practice through role-playing. Transfer of learning activities can also be provided to help students apply each skill beyond the lesson (Committee for Children, 2011).

*Second Step* has been documented as an exemplary program with strong research support by the U.S. Department of Education (2001) and the National Panel for Evidence-Based School Counseling (Carey, Dimmitt, Hatch, Lapan, & Whiston, 2008). The National Panel evaluated *Second Step* as being effective compared with control groups, leading to increases in prosocial behavior and decreases in aggressive behavior, and having strong ecological validity. Several other research studies have also evaluated the efficacy and effectiveness of *Second Step*. Sprague and colleagues (2001) compared nine treatment schools (six elementary and three middle) with six comparison schools (three elementary and three middle) to determine whether school-wide behavioral practices would lead to increases in prosocial behavior and safety. All students in the treatment schools received the *Second Step* curriculum, which was implemented by classroom teachers for 1 year, and Effective Behavior Support, which included a reinforcement system utilizing school-wide token economies and rules (Center for Effective Collaboration and Practice, 2001). Students in third through eighth grade were administered the Knowledge Assessment for *Second Step* (KASS; Committee for Children, 2004). Results indicated that treatment elementary schools reported greater decreases in office discipline referrals than comparison schools, and each grade across schools showed post-intervention improvements on the KASS. The effectiveness of the *Second Step* Impulse Control and Problem Solving unit has also been documented for third- and fourth-grade students, with increases in knowledge found from pre- to post-intervention (Hart et al., 2009).

Additional studies have focused specifically on increases in student prosocial behavior and decreases in aggressive behavior. Most findings indicate that *Second Step* leads to improvements in prosocial and cooperative behaviors (Cooke et al., 2007; Taub, 2001), although one study showed small but significant increases in angry and aggressive behavior and decreases in impulse control (Cooke et al., 2007). In this study, *Second Step* was administered to third- and fourth-grade students in five elementary schools. Self-report questionnaires related to aggression and coping skills, behavioral observations of prosocial and aggressive behaviors, and disciplinary referrals were also collected. The researchers attributed the small increases in angry and aggressive behavior to a small group of...
students at risk for aggression difficulties based on office discipline referrals, indicating that they displayed significantly more difficulties in these behaviors at the beginning of the study than did those who had not been referred.

Taub (2001) also emphasized the ease in developing new positive skills compared with eliminating bad behavior. Within this study, the effectiveness of Second Step on students in third through fifth grade was evaluated. Many of the students were from low socioeconomic status (SES) backgrounds, with 40% of the intervention school and 37% of the control school being eligible for a free or reduced lunch. Teacher reports of student behavior and engagement in negative or positive behaviors (e.g., fighting with peers and following classroom rules) were also examined. Students receiving Second Step showed increases in social competence and slight decreases in antisocial behavior compared with a control school. Taub hypothesized that problem behaviors may exhibit slow and steady improvements across semesters, due to the findings of more gradual decreases in antisocial behavior over time.

Another more recent study conducted in Norway (Holsen, Iversen, & Smith, 2009) also examined the effects of the Norwegian version of Second Step (Steig for Steg) on fifth- and sixth-grade students from low SES backgrounds. When conducting this study, the researchers were specifically interested in examining whether the effects of this program varied across different levels of SES. Comparisons of program effects were made between students reporting low SES and those reporting middle- and high-SES backgrounds. Results indicate that compared with middle- and high-SES students, those from low SES backgrounds reported higher improvements in social competence, school performance, and life satisfaction.

Frey, Nolen, Edstrom, and Hirschstein (2005) evaluated the effect of Second Step on student behavior, but expanded on previous research by examining student cognitions (beliefs and attitudes) through student ratings of the intentions of vignette characters. A multi-method, multi-informant approach was used through teacher-reported social behavior, a self-report survey of beliefs and emotions, and observations of structured conflict situations. Increases in social competence and decreases in antisocial behavior were seen during the first year of Second Step implementation, with stronger effects being found for children with high levels of antisocial behavior. However, there were no noticeable differences in social competence and behavior during the second year of implementation.

The research conducted to date on Second Step strongly supports the use of this program as a school-wide prevention technique to increase social and emotional behavior. Multi-informant and multi-method research has been conducted, Second Step has been implemented with high fidelity (e.g., Cooke et al., 2007; Larsen & Samdal, 2007), and studies have supported both the efficacy and effectiveness of the curriculum (Fitzgerald & Edstrom, 2011). Although there is some evidence that Second Step leads to significant improvements for low SES students (Taub, 2001), there is no available research to support the use of Second Step in schools consisting of predominantly Latino, low SES, and English language learner students.

English Language Learners and Latino Youth

English language learners are one of the fastest-growing portions of the kindergarten-through-12th-grade population. Currently, approximately 10.9 million school-aged children speak a language other than English at home (U.S. Census Bureau, 2007), and by the year 2030, approximately 40% of the school-age population will speak English as a second language (U.S. Department of Education & National Institute of Child Health and Human Development, 2003). Presently, in California, Latino students account for 51% of the school population. Although the number of Latino students is increasing rapidly, their educational achievement lags behind other groups of students, with only 61% graduating high school within 4 years (Education Trust-West, 2010). As society becomes
increasingly diverse, and in consideration of the correlates between school violence and school dropout, there is a need to investigate how effective school violence prevention and intervention programs can be for Latino English language learners as well.

Due to the various risk factors that Latino youth may experience (e.g., poverty, racial discrimination, and acculturation stress), recent research has focused on how to best support and promote SEL and prevent violence in this population (Bandy & Moore, 2011; Blanco-Vega, Castro-Olivo, & Merrell, 2008; Reyes & Elias, 2011). When implementing SEL school-based programs, researchers have agreed on the importance of including the following factors to ensure successful outcomes: a) examining cultural factors such as level of acculturation, acculturation stress, and immigration experience (Blanco-Vega et al., 2008; National Center for Mental Health Promotion and Youth Violence Prevention, 2010); b) considering their spoken language (Bandy & Moore; Blanco-Vega et al., 2008); c) family involvement (Bandy & Moore, 2011; Blanco-Vega et al., 2008; Reyes & Elias, 2011); and d) focusing on promoting positive behavior and values, such as respect, positive relationships, and school belonging (Blanco-Vega et al., 2008; Reyes & Elias, 2011). With respect to this latter factor, Reyes and Elias (2011) suggest that intervention programs that promote SEL provide students with the chance to respond to questions without being criticized, regularly acknowledge and build on student strengths, and involve them in cooperative learning with other peers.

**CURRENT STUDY**

Current evidence in support of the SEL program Second Step suggests that it will be a likely candidate for schools interested in implementing a school-wide prevention program. It may be particularly useful for a Latino, low SES, and English language learner population of students due to its focus on promoting positive behavior, inclusion of supplemental family materials, and option to implement the curriculum in Spanish. However, prior to supporting such practices for schools with a predominately Latino, low SES, English language learner population, empirical evidence is needed. Although previous research has examined the effect of Second Step across multiple grades (e.g., Sprague et al., 2001) and in low SES school settings (e.g., Holsen et al., 2009; Taub, 2001), the current study extended such research by examining its effects on a population of students predominantly from a Latino and low SES background, with more than three-quarters of the students identified as English language learners. The following research questions were addressed: a) Do students display increased knowledge of SEL skills from pre- to post-intervention? and b) Do students display decreases in behavioral and emotional risk from pre- to post-intervention? It was hypothesized that students would have significantly higher levels of knowledge and significantly lower behavioral and emotional risk post-intervention.

**METHOD**

**Participants**

Data were collected from one elementary school on the central coast of California during the 2010 to 2011 school year. Within the school, the student population includes 94% Latino youth, 3% Anglo youth, and 1% African American youth. Most of the students are eligible for free or reduced lunch (92%), and more than three-quarters are identified as English language learners (79%).

A total of 403 students in preschool through fourth grade received the 2002 edition of the Second Step curriculum in English. All students in third and fourth grade were administered the KASS (Committee for Children, 2004) through a class-wide assessment and completed the self-report version of the BASC-2 Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007). For students in preschool through second grade, a random selection of approximately five students from each classroom completed the individually administered pre-reading KASS. This
approach was chosen to minimize class time interruptions, as the pre-reading KASS requires a 15-minute administration of the assessment per student. Additionally, teachers of the randomly selected students completed the teacher-rated BESS. Due to student absences, student attrition over the course of the year, and noncompletion of forms by teachers, pre- and post-assessment data were not available for all students. Consequently, the data for 165 students were included in the current study. These data consisted of all students in third through fourth grade for whom complete BESS and KASS data were available ($n = 106$), as well as the 59 students who were randomly assigned for pre- and post-assessment in preschool through second grade.

**Measures**

**Social and Emotional Knowledge.** The KASS (Committee for Children, 2004) is a measure developed by the authors of the *Second Step* curriculum to assess knowledge in social and emotional skills. The preschool through second grade pre-reading knowledge assessment consists of two problem situations and three facial expressions that students are asked to interpret. The third and fourth grade knowledge assessment consists of various problem situations and related social and emotional skills knowledge questions presented to students. Assessments are individually administered to students in preschool through second grade and administered simultaneously to the entire class in third and fourth grade. It is designed to be utilized in a pre- and post-test format, with standardized administration, scoring, and interpretation. Questions are provided orally and in picture format to students in preschool through second grade and both orally and in written format for students in third and fourth grade. Students are allowed as much time as needed to complete the assessment. The authors indicate that a pilot and field test were conducted in 2002–2003, leading to revisions and further field testing in 2003–2004; however, no data on psychometric properties are available (Committee for Children, 2004). All students were administered the KASS in English.

**Behavioral and Emotional Risk.** The BESS (Kamphaus & Reynolds, 2007) is a standardized rating scale that identifies behavioral and emotional strengths and weaknesses for children and adolescents. It consists of teacher-, parent-, and self-report forms for students in preschool through high school. Two teacher forms (preschool: 3–5 years of age; child/adolescent: 5–17 years of age) and the student self-report form (8–17 years of age) were utilized in this study to assess behavioral and emotional risk. The number of items range from 25 to 30, depending on the age and informant. There are four rating options—*never*, *sometimes*, *often*, and *almost always*—for each item. A total score is computed to indicate risk for behavior problems. The BESS provides $T$ scores with a mean of 50 and a standard deviation of 10. The sum of the items generates a total $T$ score with high scores reflecting more problems; a $T$ score of 20 to 60 suggests a “normal” level of risk, 61 to 70 suggests “elevated” risk, and 71 or higher suggests an “extremely elevated” level of risk.

The BESS was developed using a normative sampling group of 12,350 teacher, parent, and student forms, collected from 233 cities in 40 states (Kamphaus & Reynolds, 2007). The psychometric properties of the BESS (across all forms) are generally acceptable, having good split-half reliability (.90–.96), test–retest reliability (.80–.91), inter-rater reliability (.71–.83), sensitivity (.44–.82), and specificity (.90–.97). Furthermore, the measure has acceptable convergent validity with the Achenbach System of Empirically Based Assessment (.71–.77), Conners’ Rating Scales (.51–.78), Vineland Adaptive Behavior Scales (.32–.69), Children’s Depression Inventory (.51), and the Revised Children’s Manifest Anxiety Scale (.55). Additional psychometric information is available in the manual (Kamphaus & Reynolds, 2007). Forms are available in both English and Spanish; all students elected to complete the forms in English.
Procedures and Analyses

Prior to implementing the *Second Step* curriculum, the KASS pre-test was administered. A random selection of preschool through second-grade students was administered the pre-reading KASS, and all third and fourth graders completed the KASS. Some students required additional time and individual support to complete the KASS due to language difficulties and other individual special needs. This additional support was provided by doctoral students either immediately following the class-wide assessment (extra time was provided) or at a different time in a small group.

To determine whether the *Second Step* curriculum may have broader effects on the behavioral and emotional functioning of students, the BESS was also administered prior to the implementation of the *Second Step* curriculum. General education teachers in preschool through second grade completed the BESS teacher form, and students in third and fourth grade completed the BESS self-report through a class-wide administration. Teacher reports were chosen for students in preschool through second grade due to the unreliable nature of self-reports for young children (Achenbach, McConaughy, & Howell, 1987). The same teacher completed the BESS form at pre- and post-assessment, with BESS information only being solicited from students who completed the KASS. Students in third and fourth grade provided self-report data to both minimize teacher requirements and because students may be well suited to provide information regarding their emotional symptoms (Smith, 2007). Doctoral students in school psychology administered and scored the KASS and BESS assessments.

The appropriate grade-level version of the complete *Second Step* curriculum (Unit I: Empathy Training, Unit 2: Impulse Control and Problem Solving, and Unit 3: Anger Management) was administered by school psychology doctoral students to all students in preschool through fourth grade. Consistent with the school district’s English-only instruction, the *Second Step* curriculum was provided in English for kindergarten through fourth-grade students. However, for the preschool students, many of whom had limited English proficiency, portions of the English curriculum were presented in Spanish by a bilingual doctoral student to enhance understanding.

School psychology doctoral students with extensive training in social and emotional assessment and intervention were the primary teachers of the *Second Step* lessons. Classroom teachers were typically present and occasionally participated in the sessions. The number of lessons varied in each grade from 20 to 25, with sessions lasting for approximately 30 minutes. Lessons started in late September and continued through late April of the 2010–2011 school year. *Second Step* materials were utilized in each session, with adherence to the standardized procedures of the curriculum. Due to the fact that many of these students were English language learners, additional information was provided when needed to further clarify the concepts and assist in generalization to their school environment, such as providing an additional example based on a specific scenario that occurred for the students at recess. Although there were no fidelity checks on the administration of the implementation of the *Second Step* curriculum, issues regarding implementation of the intervention were discussed during weekly group supervision, which was provided by two school psychology professors. To inform parents about what was being addressed in the curriculum, all *Second Step* take-home letters were written in both Spanish and English to introduce the curriculum, provide an overview of each unit, and give suggestions on how to maintain the curriculum skills that were taught.

On completion of the *Second Step* curriculum, post-test KASS and BESS assessments were collected in the same way as pre-test data. The same rater scored both pre- and post-test assessments to avoid confounds. Two paired-samples t-tests were conducted to evaluate change in KASS and BESS scores from pre- to post-assessment across grades. Additional paired samples t-tests were also conducted to evaluate change in KASS and BESS scores within each grade.

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RESULTS

Descriptive statistics for the pre- and post-assessments for each grade level are provided in Table 1. Results from the paired-samples $t$-test indicated significant differences between overall pre- and post-intervention KASS scores, $t(164) = -20.68$, $p < .001$. Results also indicated significant differences between overall pre- and post-intervention BESS scores, $t(164) = -2.06$, $p < 0.05$. However, unexpectedly, post-intervention BESS scores were significantly greater than pre-intervention BESS scores, indicating that students’ emotional and behavioral risk increased over the course of the intervention.

To further investigate change in BESS and KASS scores pre- and post-intervention, paired-samples $t$-tests were also conducted for each grade. Results indicate that there were significant increases in KASS mean scores for each grade, with $p < .001$. Although there was a significant difference between overall pre- and post-intervention BESS scores, further analyses by grade revealed that only the change in BESS scores for third grade was statistically significant, $t(53) = -3.45$, $p < .001$.

DISCUSSION

Because of the negative consequences that can result from school violence, social and emotional competence needs to be targeted. Second Step is an SEL curriculum that teaches prosocial skills and reduces aggressive behavior (Committee for Children, 2011). The goal of this study was to evaluate school-wide effects of Second Step in preschool through fourth grade for a predominately Latino, English language learner population. Changes in social and emotional knowledge and changes in behavioral and emotional risk from pre- to post-intervention were examined.

Social and Emotional Knowledge

As predicted, overall results across grades indicated that there were significant increases in student knowledge of social and emotional skills from pre- to post-intervention. These results are
consistent with previous research studying the implementation of Second Step at the school-wide level and provide further support for its effectiveness (e.g., Sprague et al., 2001). Unlike previous research, this study draws from a student population with largely low SES, predominately from Latino backgrounds, with a large percentage identified as English language learners. Results from the current study indicate that the Second Step curriculum is also effective on a large-scale level with students who may be considered as minorities in other school settings. Similar to previous research (Holsen et al., 2009; Taub, 2001), these results also show that this curriculum leads to significant increases in social and emotional knowledge in students from low SES backgrounds. These findings are important, particularly because individuals from minority groups and low SES backgrounds may be at greater risk for being negatively affected by detrimental outcomes (e.g., Reyes & Elias, 2011).

Behavioral and Emotional Functioning

Despite increases in social and emotional knowledge, results suggest that the behavioral and emotional functioning of students did not improve over the course of the implementation of Second Step. Therefore, the effectiveness of Second Step may differ, depending on the outcome of interest. Contrary to our hypothesis, there was a significant increase in overall BESS scores from pre- to post-intervention. Specifically, results showed that third-grade students exhibited statistically significant increases in BESS scores post-intervention, meaning they reported higher levels of behavioral and emotional problems following the intervention. No other significant changes across grades were noted. It is therefore important to note that the overall statistically significant change may have been largely influenced by the changes in this specific grade.

Increases in BESS scores are consistent with the results of Cooke and colleagues (2007), who found small but significant increases in problem behavior following the implementation of Second Step. These authors attributed this difference to a group of students who displayed significantly more difficulties in aggressive behavior prior to the implementation of Second Step. This may have also occurred in the current study; however, an alternative potential explanation for these findings is that some students may have better understood the items at the end of the year, due to developmental changes and increases in language comprehension. Along these same lines, it is possible that after being exposed to the Second Step curriculum, students became more aware and self-reflective of their behavior, particularly because there were significant increases in social and emotional knowledge. Consequently, their post-intervention ratings may have been a more valid representation of their behavior. Alternatively, it may be possible that although school-level social and emotional skills were being taught, exposure to risks within the community may have increased, thereby influencing students’ vulnerability to at-risk behaviors.

Limitations and Future Directions

There are a number of limitations that should be considered when interpreting these results. Most importantly, a large percentage of the students in this elementary school were identified as English language learners (79%). Consequently, post-intervention increases for both non-readers and readers may have been due to improvements in language proficiency throughout the year. Because this study did not utilize a control group, it is impossible to tell whether increases in KASS scores were solely due to the Second Step intervention or other factors, including increased proficiency in English. Further examination is necessary to disentangle the effects of learning a second language on self-report assessments. Similarly, future studies should examine the individual effects of being Latino, being an English language learner, and coming from a low SES background on KASS scores.

Another limitation related to this population of English language learner students is that students in all grades, with the exception of preschool students, received the curriculum in English. Although
this was due to the district’s English-only instruction policy, not all students may have had sufficient language proficiency to completely understand the Second Step curriculum, depending on their stage of language acquisition. Although significant differences between overall pre- and post-intervention KASS scores were found, it is not clear whether students understood all the concepts taught because language acquisition can be a lengthy process. Language proficiency also presented a challenge in collecting self-report data with the BESS. For example, English language learner students had a hard time understanding what “often” meant, thus, they did not utilize that answer choice appropriately. Additionally, the fact that the preschool curriculum was provided in both English and Spanish violates implementation fidelity. Although supplemental Spanish material from the curriculum was used, the language in which it was provided varied based on student needs.

Furthermore, as addressed in previous research, there are various cultural factors that should be examined within SEL interventions when targeting Latino students, including their spoken language, family involvement, and positive behavior and values (e.g., Bandy & Moore, 2011; Blanco-Vega et al., 2008; Reyes & Elias, 2011). The Second Step curriculum directly targets positive behavior and provides some tools (i.e., take-home letters) to involve families within the curriculum. Taking the above considerations into account, the current study provided parents with take-home letters, but did not actively involve them in the curriculum. Despite the fact that significant increases were found in social and emotional knowledge, it may have been beneficial to hold parent meetings in both Spanish and English before and after the intervention to further discuss how these skills can be practiced within the home setting and ways to maintain their use after the curriculum has finished. Future studies using Second Step should therefore examine how family involvement and other cultural factors of Latino youth contribute to their social and emotional outcomes.

Another limitation is that the Second Step program was implemented and the KASS was scored by different graduate students. It is therefore possible that there may have been examiner effects. However, the same examiner scored both pre- and post-intervention data to avoid confounds. Along these same lines, despite the fact that standardized procedures of the curriculum were adhered to during implementation, treatment integrity was not checked. This may have been particularly important to check due to the fact that the curriculum was both implemented and scored by different graduate students. Future research is needed to determine whether there are differences in the overall effectiveness of the program when it is implemented by classroom teachers as opposed to supplemental staff, such as graduate students. Differences may be present, as classroom teachers may be better able to generalize the skills learned in Second Step to other lessons and integrate them into daily routines.

Finally, it is important to note the limitations of the measures utilized. Psychometric support is currently lacking for the KASS, and external criteria for improvement from pre- to post-intervention are warranted. Additionally, the brief measure chosen to assess behavioral and emotional functioning was designed to detect overall risk and did not provide sufficient information to do more detailed analyses. Future research should consider utilizing a more comprehensive measure of behavioral and emotional functioning or a narrow-band measure specific to areas targeted by the intervention so that differences by problem type (e.g., externalizing or internalizing problems) can be examined.

Other limitations on the measures and procedures used in this study are present. For example, teacher BESS ratings were used in preschool through second grade, and student BESS self-reports were used in third and fourth grade. As a result, there may have been differences in teacher and student perceptions of a student’s behavior. Furthermore, many of the post-BESS ratings were completed around the time of California state testing. Increases in BESS scores may have been influenced by certain environmental conditions, such as increased student stress. Additionally, research suggests that on average, school-wide interventions take 3 to 5 years to show significant changes in student behavior (e.g., Bradshaw, Reinke, Brown, & Bevans, 2008). Thus, measures of social and emotional
well-being may require longer term longitudinal evaluation to indicate significant changes. This may be particularly important because previous research has shown that at-risk students (e.g., those with more behavioral referrals) may be less likely to respond to school-wide interventions (McIntosh, Horner, Chard, Boland, & Good, 2006). Consequently, future research in this area should examine whether behavioral and emotional status is a factor in identifying students who do not respond to SEL curriculums.

**Implications for Practice**

Despite the previously mentioned limitations, the current study contributes to existing evidence that supports the effectiveness of *Second Step*. It also expands on previous research by examining the effect of this violence prevention program at the school-wide level on a population of students with a low SES, from a predominantly Latino background, and for whom English is a second language. This provides important information for school psychologists and teachers working with a similar population of students. Although English language learners may require additional group or individualized supports to assist with specific language needs, these results suggest that they may also benefit from school-wide efforts that teach students about positive interactions with peers and provide them with tools to solve interpersonal conflicts. Furthermore, because students from low SES backgrounds may be more likely to have significant deficits in social and emotional readiness (Kaiser, Hancock, Cai, Foster, & Hester, 2000), it is critical that they be provided with a school-based intervention to target the development of these skills. With a large focus being placed on SEL programs, as well as the implementation of positive behavior supports at the school-wide, classroom, and targeted levels, these results provide further evidence for the value of *Second Step* within this framework.

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