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STRATEGIES & TOOLS to EMBRACE PREVENTION w/ UPSTREAM PROGRAMS (STEP UP)

A Comprehensive Evaluation Report

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EXECUTIVE SUMMARY

Strategies & Tools to Embrace Prevention with Upstream Programs (STEP UP) is a social and emotional learning curriculum created for middle school students (Goldberg, 2013). The program uses evidence-based strategies to bolster protective factors for the specific purpose of preventing aggressive and self-destructive behaviors, including suicide. The purpose of this comprehensive evaluation report is to provide the theoretical basis for this program as well as to report the results of a randomized experimental design research study that evaluated the effects of the STEP UP curriculum on the social and emotional learning of middle school students over a two-year period (2013-2014).

A total of 59 middle school students participated in the study for two years in either the control or experimental group. A pre and posttest design was used in the study, with students and participating teachers assessed before the STEP UP curriculum was implemented and after the STEP UP curriculum was completed. Results of this study indicate that this program does improve students' social and emotional learning skills as evidenced by significant improvements on the total Social Emotional Assets and Resilience Scales (SEARS-Teacher) assessment as well as on all subscales as compared to the control group.

The students who participated in STEP UP are now equipped with better social and emotional skills. They have learned social skills, emotion management and regulation, how to respect boundaries and display empathy, and multiple strategies for making healthier social and emotional choices. As this is the first study to demonstrate the effectiveness of this program, future studies should replicate the results obtained in the program using a larger sample size. In addition, because the demographic distribution of the students was limited, this study should be replicated with a more diverse sample of students to determine its effectiveness for diverse populations.

INTRODUCTION

Strategies & Tools to Embrace Prevention with Upstream Programs (STEP UP) is a comprehensive social and emotional learning curriculum designed for middle school students that was developed in response to the National Strategy for Suicide Prevention (2012) aimed at promoting universal prevention strategies for healthy populations. Based on the elementary school level curriculum, Camp MakeBelieve Kids, STEP UP seeks to expand the benefits of social and emotional learning (SEL) to older students in a more appealing way that is congruent with their level of developmental progression. Awareness of the importance of social and emotional learning has grown in the past few decades and has spurred the integration of SEL concepts and strategies into academic standards and practices (Devaney et al, 2006; Elbertson, Brackett, & Weissberg, 2009; Kress et al, 2004; Weissberg, 2015). Increased use of SEL in educational settings has the potential to improve academic, behavioral, and health outcomes in children and adolescents (Durlak et al, 2010; Durlak et al, 2011; Elias et al, 2014). STEP UP is in a unique position to address all of these components with an emphasis on positive instruction, self-reflection, and the ability to promote safer and healthier school and community climates.

Social-emotional competence and academic performance have been shown to be highly related, providing encouragement for the adoption of SEL programs as school-wide curricula. Zins, Elias, & Greenberg (2003) have identified three main categories where the majority of outcomes can be attributed to SEL programs: attitudes, behaviors, and performance. Positive attitudes include factors such as a higher sense of self-efficacy, improved coping with school stressors, and increased understanding of the consequences of behavior. Likewise, reductions in aggression and interpersonal violence, better conflict resolution skills, and less substance use are among the positive behaviors associated with SEL programs. Lastly, improved performance outcomes seen with participation in SEL programs include increased achievement over time, better problem solving and planning skills, and higher test scores (Zins, Elias, & Greenberg, 2003). STEP UP promotes the understanding and regular practice of SEL competencies among students in order to slow or stop the development of problem behaviors, helping to prevent the negative consequences caused by these behaviors over time.

Of all the adverse behavioral and psychological factors that can negatively impact the lives of youth, suicide is the most dangerous. Suicide is the 3rd leading cause of death among youth aged 10-14, and the 2nd leading cause of death for ages 15-34 (CDC, 2015), but it is preventable. One effective way of helping to reduce the risk of suicide is to increase the strength of protective factors. This upstream way of approaching suicide prevention is beginning to take priority (at least in research efforts) over traditional crisis intervention strategies (NAASP, 2014). Protective factors that help to reduce the risk of mood and anxiety disorders, social isolation, and ultimately suicide include a strong sense of community, resilience, and positive coping strategies – all of which can be taught and reinforced through effective SEL programs (Wyman, 2014). STEP UP emphasizes the importance of building up these protective factors, and addresses their impact on long-term outcomes, such as the prevention of behaviors and ideation associated with suicide.

Purpose of Report

The purpose of this comprehensive evaluation report is to provide a foundation of evidence showing the effectiveness of STEP UP as a social and emotional learning curriculum for middle school students. A brief overview of previous literature that describes the benefits of positive social and emotional learning will be presented, including research conducted on the health outcomes associated with social and emotional learning programs, why SEL is especially important for youth, and current gaps in the available knowledge and evidence for the effectiveness of SEL programs. Additionally, this report will explain the theoretical framework upon which the STEP UP program was built and describe its curriculum, specifying how it addresses the core competencies of social and emotional learning. Lastly, this report will provide an in depth description of previous research conducted with the STEP UP program, an analysis of the results, and a discussion of its effectiveness based on this research.

LITERATURE REVIEW

Social and emotional learning (SEL) is defined by the Collaborative for Academic, Social, and Emotional Learning (CASEL) as,

“The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.” (CASEL, 2013)

Programs and curricula which incorporate activities that promote healthy social and emotional learning have been shown to reduce risk factors, enhance protective mechanisms, and increase academic performance and a variety of positive health outcomes (Greenberg et al, 2003; Sklad et al, 2012). In a meta-analysis conducted in 2012 that reviewed the effects of “universal, school-based social, emotional, and/or behavioral programs,” Sklad and colleagues found the most beneficial effects of these types of programs to be on academic achievement and substance abuse. Additionally, moderate effects were also seen for social skills, antisocial behavior, positive self-image, mental health, and prosocial behavior (Sklad et al, 2012). It is encouraged that these curricula be incorporated into academic standards from preschool through high school, emphasizing five interconnected sets of core cognitive, affective, and behavioral competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Weissberg & Cascarino, 2013). Other benefits that have been shown to be attributable to effective SEL programs include “improved educational outcomes...reduced crime, lowered substance abuse, and decreased teen suicide attempts,” as well as a positive financial return on the investment in students’ social and emotional learning that can be as high as \$28 for each dollar spent (Zins & Elias, 2007). Meta-analyses of SEL programs have demonstrated significant improvements in students’ attitudes, behavior, interpersonal skills, school bonding, as well as an increase in test scores (as high as a 17% increase among children at highest risk for failure; Durlak et al., 2011), a 44% decrease in suspensions, and a 27% decrease in other disciplinary actions (CASEL, 2007). While there has been extensive research on the effectiveness of SEL programs, there is still much that can be done to create, implement, and evaluate even more effective programs that are available to the public. This review will establish the current base of knowledge

on SEL programs, specifically addressing the health outcomes associated with SEL, why early introduction of SEL standards and continuity across the lifespan is most effective, and review current SEL programs and how they compare to STEP UP.

Health Outcomes Associated with Social and Emotional Learning

Previous research on social and emotional learning (SEL) programs has identified a wide variety of positive outcomes associated with SEL programs conducted in school settings. Successful school-based programs may encourage changes in the school climate, require multiple approaches, and promote “positive academic, social, emotional, and health behavior” (Bridgeland et al, 2013; Greenberg et al, 2003). SEL programs can be considered upstream programs, as they do not focus on crisis or problem behavior intervention, but rather on providing students with the social and emotional life skills necessary to navigate situations and relationships from which problem behaviors may arise. Research has shown that SEL programs are effective in preventing bullying behavior and victimization (Fox & Boulton, 2003; Dereosier, 2004), as well as enhancing skills for emotional regulation which may help prevent aggressive and oppositional behavior (Taylor, Eddy, & Biglan, 1999). SEL increases emotional intelligence (EQ), which is the ability to recognize emotions in oneself and others, communicate emotions effectively, and use emotions to guide decisions; EQ is a major predictor of lifetime success in relationships and in the workforce (Bradberry & Greaves, 2009; Farrington et al., 2012). A meta-analysis of 177 primary prevention programs for behavioral and social problems in children and adolescents conducted by Durlak & Wells (1997) revealed a significant reduction in problems and a significant increase in competencies such as communication skills, assertiveness, and self-confidence. Improved physical health can also be a long term outcome attributed (in part) to participation in SEL programs. Aside from decreased drug, tobacco, and alcohol use, some research has found decreases in sexually transmitted infections and lower rates of HIV/AIDS (Zins, Elias, & Greenberg, 2003). Increased mental health has also been found to be associated with early exposure to SEL. According to a 2005 survey replicating the National Comorbidity Survey, more than half of all diagnosable mental illnesses begin prior to the age of 14, indicating that early intervention focusing on protective factors could be beneficial to overall mental health (Kessler et al, 2005).

Additionally, SEL programs can help to increase and strengthen protective factors that, in the long term, can work towards the prevention of suicide (Alperstein & Raman, 2003; SPRC, 2012; Wyman, 2014). The National Strategy for Suicide Prevention, published in 2012 by the U.S. Surgeon General and the National Action Alliance for Suicide Prevention, calls for “Increased knowledge of the types of interventions that may be most effective for suicide prevention, and an increased recognition of the importance of implementing suicide prevention efforts in a comprehensive and coordinated way” (Office of the Surgeon General, 2012). Modifying upstream risk factors, such as previous suicide attempts and/or self-harm, and protective factors known to affect suicidal thought and behavior can help to reduce the risk of suicide along with related mental health and substance abuse problems later on, as well as promote the general health of a broader population (Wyman, 2014). Many school-based SEL programs aim to achieve this by focusing curricula and activities on strengthening the self-regulation of emotions and behavior in children. Protective factors against suicide that can be addressed by SEL programs include multi-level approaches to strengthening community, interpersonal, and individual attributes such as encouraging a safe and supportive school environment (community-level), establishing a sense of

connectedness (interpersonal level), and teaching coping and problem solving skills that can be used and reinterpreted throughout the lifespan (individual level) (Office of the Surgeon General, 2012). As of 2015, suicide is the 3rd leading cause of death in the United States for youth ages 10-14, and is the 2nd leading cause of death for ages 15-34 (CDC, 2015). In addition, during 2013-2014, 17% of high school students in the United States seriously considered attempting suicide (CDC, 2015). In the following sections, this report will discuss how the STEP UP program can help increase protective factors and resilience in children and adolescents and reduce risk factors, such as social isolation, thereby reducing the risk of suicide over time.

Importance of Improving Social Emotional Health in Children

Prevention programs have the greatest effect when they are implemented before any problems arise that may need to be addressed with intervention or treatment (Kessler, 2005). The presence of risk factors for negative social and emotional health outcomes in childhood have been shown to increase the likelihood of problem behaviors during adolescence and young adulthood (Alperstein & Raman, 2003; Webster-Stratton, Reid, & Stoolmiller, 2008). Children that are introduced to prevention programs early on (that focus on aspects of SEL which enhance resiliency and self-regulation) will be able to apply the skills learned in that program to problem situations or negative life experiences they may experience later on (Gitterman & Sideriadis, 2014; Matsen & Coatsworth, 1998). Reinforcement of those lessons during adolescence will help to ensure that students are guided to evolve the SEL skills learned as they mature and navigate new experiences (Evans, Murphy, & Scourfield, 2015).

Certain populations of children have been shown to be more vulnerable to negative health outcomes such as bullying and suicide than others: those who are overweight or obese (Anderson, Hayden, & Tomasula, 2014), those on the autism spectrum (Storch et al., 2013), those who identify or are identified as a sexual minority (Liu & Mustanski, 2012), those experiencing family disruptions (Beautrais, 2001), those that are disadvantaged or in poverty (Dashiff et al., 2009; Yoshikawa, Aber, & Beardslee, 2012), those in the juvenile justice system (Abram et al., 2008), and those diagnosed with mental illness, conduct disorders, or ADHD (Beautrais, 2002; Brent et al., 1993; Chronis-Tuscano et al., 2010; Shaffer et al., 1996). Victims and perpetrators of bullying are also at a significant risk for suicide (CDC, 2014; SPRC, 2011). While bullying doesn't directly cause suicide, it does set the stage for suicide among children who are already vulnerable (Holt et al., 2015; Nock, 2008). In order to provide the greatest benefit of SEL programs for the above mentioned at-risk groups, a universal school-wide approach to the implementation of SEL both in the classroom and as part of the overall school climate is recommended (Zins & Elias, 2007). Programs that provide training for teachers, school staff, and parents help to create a safer and healthier community environment that reinforces social and emotional life skills for youth and adolescents (Durlak et al., 2007; Greenberg et al., 2001; Tsiantis et al., 2013).

Current SEL Programs

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has identified six effective SEL programs targeting middle school students. These programs are available for a variety of settings and implementation methods. In order to receive designation as an effective SEL program, a program must pass a rigorous review by CASEL, demonstrate that it fully



incorporates all five of the SEL core competencies, offer training and ongoing support for schools and instructors of the program, and conduct a qualified evaluation showing significant positive outcomes. The six programs on the list published in 2015 met all of these qualifications. However, not one of these programs offers the same comprehensive approach combined with positive outcomes as STEP UP. The table below shows how STEP UP compares to the designated effective SEL programs reviewed by CASEL. As of January 24, 2016, STEP UP is undergoing the final stages of review by CASEL as an evidence-based effective SEL program; a final decision and designation will be awarded in February 2016.



Table 1. Comparison of STEP UP to CASEL’s List of Effective SEL Programs

		STEP-UP	EL Education	Facing History and Ourselves	Lions Quest, Skills for Adolescence	Responding In Peaceful and Positive Ways	Second Step: Student Success Through Prevention for Middle School	Student Success Skills	
Program Design	Grade Range Covered	6th - 8th	6th - 12th	6th - 12th	6th - 8th	6th - 8th	6th - 8th	6th - 12th	
	Grades Evaluated	6th - 8th	6th - 8th	7th - 10th	6th, 7th	6th, 7th	6th	7th, 9th, 10th	
	Approaches to Promote SEL	Teaching Practices	✓	✓	✓				✓
		In Academic Curriculum	✓	✓ Language Arts	✓ Social Studies				
		Organizational	✓	✓					
		Free Standing SEL Lessons	✓			✓	✓	✓	✓
	Number of SEL Lessons	14	N/A	N/A	108	48	40	8	
	Settings	Classroom	●	●	●	◐	◐	◐	●
		School	●	●	●	◐	○	◐	◐
		Family	◐	●	◐	●	○	◐	◐
Community		◐	●	◐	●	○	○	○	
Implementation Support	Recommended Training Model	4 modules -- 50 minutes each	2-3 summer weeks + 30-40 days onsite and offsite.	2-5 days	2 days	3 days	4 modules -- 30-60 min /each.	1 day	
	Format	Onsite In-person	✓	✓	✓	✓	✓	✓	
		Onsite Virtual			✓			✓	
		Off-Site	✓	✓	✓	✓	✓		✓
	Technical Assistance & Impl. Supports	Admin. Support	✓	✓		✓		✓	
		Coaching	✓	✓	✓	✓	✓		✓
		Professional Learning Community	✓	✓	✓	✓		✓	
		Fidelity Measures	✓	✓	✓			✓	✓
Train the Trainer	✓			✓	✓		✓		
Evidence of Effectiveness	Outcomes Demonstrating Effects	Improved Academic Performance		✓				✓	
		Improved Positive Social Behavior	✓		✓				
		Reduced Problem Behaviors			✓	✓	✓	✓	
		Reduced Emotional Distress					✓		
		Improved SEL Skills & Attitudes	✓		✓	✓	✓		✓
		Improved Teaching Practices							

Note: Information in this table has been provided by CASEL, 2015 for all programs except STEP UP. STEP UP is currently under review, but this report will show that it does meet all of the criteria indicated above.

Comparison Table Key:

 = Can be found extensively throughout the program.
 = Minimally covered in the program.

 = Adequately covered in the program.
 = Element is not present in the program.

THEORETICAL FRAMEWORK

Social and emotional learning is supported by a variety of health behavior and psychological theoretical frameworks. STEP UP integrates components from the social ecological model, social learning theory, and positive psychology for the framework of the overall model. In addition, several theories were used to develop specific modules within the program such as generalized learning experiences, metacognition, and mindfulness. Combining these theories provides a comprehensive approach to the introduction and enhancement of social and emotional competencies during program implementation. STEP UP uses these theories to inform the strategies and tools employed in the program. The following sections will review each of these concepts and how they apply to social and emotional learning for the program as a whole and will detail how the additional theories were incorporated into specific modules of the program.

Social Ecological Model

Multi-level influences and interventions utilized in many social and emotional learning programs, including STEP UP, are approached from an ecological perspective on health behavior change. Individual behavior change is best supported when the environment and policies that directly affect the individual encourage the positive behavior. A social ecological model recognizes that the factors that influence behavior exist on multiple levels; physical environment, public policy, organizational characteristics, and sociocultural factors all have the potential to affect the success of behavior change interventions (Glanz, Rimer, & Vinswanath, 2008). These influences will interact across levels; therefore, the most effective interventions will take this into account and address factors on as many levels as possible. CASEL has published a list of program design and coordination features that should be found in a quality SEL program. They recommend that programs be designed in such a way that objectives are clear, teachers have sufficient training and implementation materials, and there is sufficient program monitoring – all of which help to ensure the fidelity of program implementation (Payton et al, 2000). Additionally, quality program coordination encourages sustainable partnerships between schools, families, and communities that can reinforce SEL program lessons and extend the reach of that healthier environment to the broader community. Instruction for parents and teachers on the importance of maintaining a positive and healthy environment (and how to achieve that in relation to what children are learning in the program) that promotes and reinforces SEL competencies in students is provided with the STEP UP program. Training for STEP UP instructors and school administrators coupled with ‘Keeping Parents in the Loop’ memos sent home with each lesson of the program allows STEP UP to provide a comprehensive ecological framework that encourages positive environmental, community, and policy changes.

Social Learning Theory

Social Learning Theory (later renamed Social Cognitive Theory) as developed by Albert Bandura of Stanford University focuses on the concept of reciprocal determinism – the idea that the person,

their behavior, and the environment all interact to predict and determine a person's behavior and/or behavior change. There are ten primary constructs outlined by Social Learning Theory (SLT) that have the ability to influence an individual's behavior: environment, situation, behavioral capacity, expectations, expectancy, self-control, observed learning (modeling), reinforcements, self-efficacy, and coping strategies (Bandura, 1977). Using Social Learning Theory and targeting a specific behavioral goal, a framework based on changing SLT variables can be designed that will allow for the implementation and evaluation of more comprehensive intervention programs. STEP UP instruction allows for these concepts to be modelled by the teachers and/or program implementers in such a way that the classroom and school environments can potentially shift towards encouraging reinforcement of SEL competencies in students. Bandura himself said that children model their own behaviors upon observations. When these observations are of adults and peer role models consistently setting examples of higher standards and expectations, children are more likely to reward themselves for healthier behaviors in a self-reinforcing manner (Bandura, 1977). Components of the STEP UP curricula and associated activities encourage students to keep themselves and each other accountable for inappropriate behaviors in a positive way. Providing teachers and parents the proper information and understanding of how to incorporate SEL lessons into everyday activities at home and at school, STEP UP helps to increase the opportunities for students to see and model positive behaviors in the adults they interact with on a daily basis.

Positive Psychology

The STEP UP curriculum is based on the principles of Positive Psychology, focusing on promoting positive and healthy ways of thinking and responding to emotions in all aspects of life (Durlak et al, 2007; Fredrickson, 2001). This is one of the ways in which STEP UP excels as an upstream preventative program. Mental health promotion through positive psychology allows for SEL programs in general, and STEP UP specifically, to boost protective factors and psychological resiliency with a universal approach. Research has shown that negative emotions can close off a person's receptiveness to learning, while positive reinforcement of positive emotions can stimulate activities and behaviors that create a period of openness which fosters additional learning along with a better ability to retain memory of and build upon that positive behavior (Fredrickson, 2001). STEP UP helps to promote positive psychology by focusing both on personal, internal attributes (i.e. self-esteem, self-awareness, self-motivation, and self-regulation) and on social, extrinsic attributes (i.e. respecting boundaries, conflict resolution, empathy, peer connections, and social awareness).

Activities and instruction for STEP UP emphasize the use of positive behavioral interventions and supports (PBIS). STEP UP instructors are encouraged to model respect towards one another, thereby fostering a climate of respect between students. Positive stimuli and rewards have been shown to be a more effective form of conditioning during social learning, so that "when behaving like others produces rewarding outcomes, modeling cues become powerful determinants of analogous behavior" (Bandura, 1977). Frequent praise for participation and following instructions is recommended by STEP UP, and instructors of the program are trained on how to "catch" students exhibiting pro-social and positive behaviors. Reminders of what the rules are and assistance in brainstorming better choices are encouraged by the program, rather than overtly negative forms of discipline. Overall, the STEP UP program works to help schools create an environment that is positive, tolerant, sensitive, and cohesive.

Theoretical Foundations for STEP UP Activities

The following sections describe the theoretical foundations for the activities associated with each of STEP UP's lesson plans. Activities in STEP UP help to reinforce the SEL lessons taught during each instructional block and encourage the application of newly acquired SEL skills in real-life situations.

Metacognition

Metacognition is defined as knowing about knowing (or thinking about thinking) and the processes involved therein (Flavell, 1979). Involving some comprehension of the learning process, metacognition plays a large role in social cognition and is connected to personality development, social learning, education, and behavior modification. While children are often limited in their metacognition, it can be developed and enhanced through adequate instruction (Lai, 2011). Developing good metacognitive skills, especially at a young age, is an important determinant for the development of social and emotional competencies including self-awareness, emotion identification and expression, self-motivation, and self-regulation (Schneider & Lockl, 2002). Throughout the STEP UP program, metacognition techniques are provided to students through direct and guided instruction, self-reflective questions, and activities such as a student journal, the Trashy Tricks™ Rating Scale to recognize and stop manipulative behaviors, and empathy building exercises.

Mindfulness

Mindfulness, often achieved through guided imagery, breath-work, and meditation, can be used both to calm children and prime them for additional learning (Murdock, 2013). The use of mindfulness techniques in SEL programs helps students to become aware of all of their senses and emotions and develop behaviors for identifying feelings. The use of these techniques in an educational setting has been found to lead to the following improvements in children and adolescents: better classroom behavior and academic performance (Black & Fernando, 2014), increased self-confidence, social skills, communication, and quality of sleep (Beigel et al, 2009; Powell, Gilchrist, & Stapley, 2008), and reduced depression, anxiety, negative coping, and somatic distress (Biegel et al, 2009; Sibinga et al, 2013; Tan & Martin, 2013). The STEP UP curriculum uses expressive art, such as guided imagery, as SEL tools to promote self-esteem, self-motivation, and self-control.

Generalized Learning Experience

The combination of all of the aforementioned theories, strategies, and techniques incorporated into the STEP UP program allows for students to receive a positive, generalizable learning experience. This is achieved through encouraging students to practice their lessons in a variety of settings and with a different groups or individuals, helping to generalize their new skills to multiple, real life situations. Students are supported by the positive and reinforcing modelling of their instructors, the positive changes in their school climate, and memos provided to parents and caregivers that are a part of each lesson which give them tools and strategies to help reinforce SEL skills at home.

In addition, instructors are provided with an alignment of the common core state standards to each of the STEP UP lesson plans, furthering their ability to integrate and generalize the lesson plans into the school curriculum. By connecting as many levels of support as possible, STEP UP strives to strengthen the relationship between students, teachers, and parents, thereby creating a deeper sense of community and inclusiveness which helps students become more excited to go to school and be involved in the learning process.

PURPOSE

The purpose of STEP UP is essentially to live up to its name by providing **S**trategies and **T**ools to **E**mbrace **P**revention with **U**pstream **P**rograms to youth at the middle school level. Demonstrating mastery of these strategies and tools is important for helping students navigate their life experiences – both good and bad – with confidence, motivation, self-control, and understanding. Functioning primarily as a prevention program, the STEP UP curriculum aims to help improve students’ ability to identify and understand their feelings and problem behaviors and then make better choices. The ultimate goal of the STEP UP program is aligned with the intended outcome of all effective SEL programs: to build emotional intelligence (EQ). Research on EQ has shown that it is becoming increasingly important for students to have instruction that builds emotional intelligence, as some of the educational benefits to a healthy EQ include improved academic performance with less instances of disciplinary action and expulsion (Petrides, Frederickson, & Furnham, 2004), better focus (Richardson, 2002), and the development of strong social support networks (Petrides et al, 2006).

STEP UP Curriculum

As an SEL program, STEP UP encourages reinforcement of the competencies learned during the program by providing training to parents and school staff, thereby helping to create safer and healthier school and community climates. The STEP UP curriculum was adapted from the Camp MakeBelieve (CMB) Kids elementary school SEL program in order to address the developmental needs of older youth (ages 11-14) and provide continuity of SEL instruction throughout the middle school years (Goldberg, 2013). Camp MakeBelieve Kids is currently undergoing its second round of reviews as an evidence-based SEL program by CASEL. CMB Kids is comprised of eight steps designed to provide students with the strategies and tools that help promote protective factors such as resiliency and effective coping skills. These 8 Steps were the foundation for creating the STEP UP curriculum, which contains 12 distinct lessons:

- Step 1) Social Connections (Lessons 3 & 4)
 - Step 2) Identifying & Expressing Feelings (Lessons 5 & 6)
 - Step 3) Respecting Boundaries (Lesson 8)
 - Step 4) Building Empathy (Lessons 9 & 10)
 - Step 5) Mood Control (Lesson 12)
 - Step 6) Stopping Manipulation (Lessons 2a & 2b)
 - Step 7) Self-Regulation (Lessons 7a & 7b)
 - Step 8) Self-Motivation & EQ (Lessons 1 & 11)
- (Goldberg, 2008)

Lessons 2 and 7 are each broken down into two separate lesson plans, creating a total of 14 lessons that are 25 minutes each. Each of these lessons target specific behaviors, include activities with a specific objective and indicators for success, incorporate a method of evaluation, list the desired outcome(s), and describe the limitations that can potentially manifest.

Every lesson in the STEP UP curriculum is geared towards increasing a multitude of generic protective factors that are associated with positive mental health. Building protective factors helps children become resilient and less likely to develop problem behaviors even with risk factors present (Guerra & Bradshaw, 2008). Because STEP UP teaches broad SEL constructs and is not focused on preventing one specific risk factor, the resulting protective factors are generic and repeatable in subsequent lessons. As students practice their newfound SEL skills and strategies, important risk factors associated with negative behaviors decrease. A primary and very important risk factor that is decreased as students go through the STEP UP program is 'social isolation,' a precursor to anxiety, depression, apathy, school failure, and becoming a target of bullying behavior (Hall-Lande et al, 2007; Rubin & Mills, 1998). Bullying behavior stops because bystanders are speaking up for their classmates, thus creating a less aggressive and more appropriate and positive response to conflict. When students feel a sense of community, they want to go to school and are less likely to succumb to negative peer pressure and allow their grades to suffer (Osterman, 2000).

The following table provides a list of risk and protective factors that the instruction and activities of each module aim to address.

Table 2. Protective & Risk Factors Addressed by STEP UP

STEP CONCEPTS	PROTECTIVE FACTORS	RISK FACTORS
Emotional Intelligence 'EQ'	Academic performance Optimism Self-control Self-esteem Social skills	Impulsivity Internalizing disorders Involvement in risky behaviors School drop out Social isolation
Understanding & Stopping Manipulation	Connectedness Physical and psychological safety Self-awareness Self-confidence Social skills	Aggression Anti-social behavior Bullying Relational abuse School drop out Self-destructive acts Social isolation
Conversational Skills & Non-Verbal Communication	Academic performance Connectedness Self-esteem Social skills Stress management	Aggression Internalizing disorders Peer rejection Social isolation Victimization

Understanding & Expressing Feelings	Connectedness Emotional regulation Physical and psychological safety Positive thinking/Optimism Problem solving Social skills	Aggression Emotional dysregulation Internalizing disorders School truancy and absenteeism Social isolation
Expressing Emotions Safely	Academic performance Emotional regulation Impulse control Problem solving Self-awareness Self-esteem	Impulsivity Internalizing disorders Isolation Physical or psychological harm Self-destructive behavior School drop out
Understanding Boundaries	Physical and psychological safety Self-awareness Self-esteem Social skills	Lack of independence Low adaptability Relational and sexual abuse Unhealthy coping skills Victimization
Building Empathy	Academic performance Connectedness Conflict resolution Creative and critical thinking Physical and psychological safety Problem solving	Emotional dysregulation Internalizing disorders School failure Social isolation Victimization
Mood Control	Academic performance Connectedness Emotional regulation Social skills Stress management	Aggression Impulsivity Internalizing disorders Social isolation School drop out

All instructional blocks incorporate student journaling. Supplemental materials are also provided for each lesson to help focus the activities on student mastery of the content of each section. Lesson activities can include individual reflection, group discussions, role playing, and self-assessments. Additionally, lessons include a take-home memo for parents that outlines the SEL instruction that was provided and how those skills can be fostered at home. The following table provides a description of each lesson’s objectives, activities, and supplemental materials.

Table 3. STEP UP Instructional Block Overview

<u>LESSON</u>	<u>OBJECTIVE</u>	<u>ACTIVITIES</u>	<u>SUPPLEMENTALS</u>
Lesson 1: Emotional Intelligence 'EQ'	Students will develop a basic understanding of the course concept of Emotional Intelligence, or, 'EQ,' and how it is relevant to their lives.	Students listen to each EQ statement, and stand up if they agree or stay seated if they disagree.	Gains from High EQ
Lesson 2A: Methods of Manipulation	Students will recognize and label (<i>self & others</i>) the methods of manipulation, referred to as the <i>Trashy Tricks™</i> .	Students role-play skits and learn to recognize and label different types of manipulation.	Trashy Tricks™ Poster Mini Examples for the Trashy Tricks™ Trashy Tricks™ Interchangeable Terms
Lesson 2B: Stopping Manipulation	Students will decrease their own manipulative behavior and stop responding to manipulation in others.	Students discuss peer pressure and the motives for using manipulation. Students play a game to create a Manipulation-Free Zone and set up a game plan to reduce manipulative behavior.	Diagram; Trashy Tricks™ Reboot Game Plan Diagram; Reboot New Route
Lesson 3: Conversational Skills	Students will build their conversational skills to improve healthy peer connections and life success.	Students practice different conversational skills while simultaneously interviewing each other. To reflect on what they learned, students then discuss the difficulty or ease of the activity as a class.	Conversational Skills – The Rules Sample Interview Questions
Lesson 4: Non- Verbal Communication	Students will gain awareness of the influence of non-verbal communication on peer connections and life success.	Students role-play in group scenes overviewing the four types of non-verbal communication.	Diagram; Non-Verbal Communication Styles 4 Types of Non-Verbal Communication

Lesson 5: Understanding Feelings	Students will gain an understanding of the concept of feelings as a unique experience to events that are ever changing.	The term “feeling” is defined through a class discussion. Students then role-play scenes to help them to understand key points related to feelings.	Diagram; Facts on Feelings
Lesson 6: Language of Feelings	Students will identify the four basic feeling states and expand their ‘feelings vocabulary.’	Students engage in creative group activities in order to understand the benefits of expressing feelings accurately and expand their “feelings vocabulary.”	Feelings Words for the Synonym "Cinnamon" Apples
Lesson 7A: Expressing Feelings Safely	Students will build skills and strategies to express feelings appropriately, safely and effectively.	Students form groups to perform different types of skits to demonstrate safe and effective strategies to express feelings.	Key Points on Feelings
Lesson 7B: Emotions Out of Control (Suicide Prevention)	Student will understand the dangerous consequences from expressing feelings ineffectively.	Students engage in a discussion on expressing feelings in healthy ways, facts about suicide, and suicide prevention. Students design suicide prevention posters.	
Lesson 8: The Three Types of Boundaries	Students will understand the concept of personal, physical and emotional boundaries that are used in relationships.	Students form groups to create skits that demonstrate many types of boundaries. Class discussion analyzing the skits is used to help students define the three different types of relationship boundaries and understand their importance.	Generalizing Boundaries to Other Disciplines
Lesson 9: Concept of Empathy	Students will broaden their understanding of how other people might experience a negative situation using own life experience.	Students will role-play to illustrate the importance of empathy in different situations and develop ways to be able to identify with feelings of others.	Sample Questions to Facilitate Experience
Lesson 10: Expressions of Empathy	Students will develop an appropriate empathetic response, which demonstrates appreciation of another person’s experience.	Students volunteer to share personal experiences (including bullying) through stories and drawings. Students learn verbal and non-verbal expressions of empathy and practice both types of expressions.	Verbal Expressions of Empathy Non-Verbal Expressions of Empathy

<p>Lesson 11: Bullying</p>	<p>Students will become aware of the role each person plays in bullying, the damage it causes and build strategies to stop the bullying behavior.</p>	<p>Students share drawings of bullying experiences, discuss the roles that people play, methods of manipulation used, and the damage caused by bullying.</p>	<p>Radical Responses to Rude Bully Behavior</p>
<p>Lesson 12: Mood Control</p>	<p>Students will develop strategies to bring down the intensity of their negative mood states.</p>	<p>Students participate in a group activity to identify and subjectively measure feelings, discuss triggers for these feelings, and come up with strategies to help change the intensity of a feeling in different situations.</p>	<p>Bringing Down the Heat</p>

Note: Fidelity Checklists were employed to ensure all content and activities were provided to students during each lesson block (see Appendix A).

STEP UP Instructor Training & Monitoring

Implementation fidelity is an essential component of effective SEL programs (Rimm-Kaufman & Hulleman, 2014). One way to help ensure fidelity is through a comprehensive training protocol. For the current study, STEP UP materials included a required in-person training of four separate sessions of 50 minutes each over a four-week period before implementation of the program in the classrooms began. Instructors were trained in how to deliver materials and incorporate the curriculum. Session 1 provided instruction on how to administer assessments. Session 2 explained the importance of SEL for students and its role in suicide prevention. Session 3 described the history and theoretical background of STEP UP as well as the content of the twelve lessons. The final session, session 4, recommendations for how STEP UP should be taught were reviewed, including rules for students, how to encourage students’ participation, and using constructive guided feedback and reinforcement. During this session, teachers were also provided an overview of the structure for each lesson plan and strategies for how to appropriately complete the lesson plan within its ascribed 25-minute period.

STEP UP also requires that instructors be monitored during program implementation a minimum of three times. This helps to ensure that the lessons are taught according to the recommended protocol, incorporating all required elements for each lesson block. Ongoing support is available to STEP UP instructors and school administration in the event that any questions or concerns arise during program implementation.

To continue emphasizing the importance of proper training and monitoring of STEP UP instructors, a new Train the Trainers manual, illustrative PowerPoint presentation, and webinar have been created to ensure that as this program grows, implementation fidelity is kept to a very high standard. These changes have not impacted the content of the program.

METHODOLOGY

Design

Using an experimental pre- and post-design, classrooms were randomly assigned to a treatment or control condition and all students within each classroom completed assessments pre- and post-intervention. The study was conducted to document the program's effectiveness at improving social-emotional learning in students in middle school.

Study Population

The sampling inclusion criteria for the intervention was a convenience sample of youth attending private middle school in seventh grade. All seventh grade students participated in the study as either part of the control group or the experimental group. Survey administration occurred simultaneously for all students and in both pre- and post-test intervals to ensure similar exposure periods. Parental consent for participation in the study was obtained for all students in the experimental and control groups.

Instruments

Social Emotional Assets and Resilience Scales (SEARS). SEARS (Merrell, 2011) are strength-based assessments that assess positive social-emotional attributes of children and adolescents. As the main purpose of STEP UP is to increase social emotional learning (SEL) and promote positive mental health, it was important to choose assessments based on positive psychology that measure positive social-emotional behaviors, rather than measure problem symptoms. Strength based measures, such as SEARS, are aligned with the SEL movement to develop students' social and emotional competencies (Romer & Merrell, 2013). The SEARS assessment tools align perfectly with the goals of the STEP UP curriculum and the concept of 'Upstream Programs.' Rather than identifying pathology or the need for treatment, the SEARS tests measure resiliency, a significant protective factor against suicide. Together, the SEARS strength-based assessments and the STEP UP SEL program take a comprehensive wellness approach to the field of mental health.

The SEARS assessment has a testing components for teachers to rate students aged 5-18 years on social and emotional attributes as well as a self-report assessment for youth ages 8-12 (SEARS-C) and youth ages 13-18 (SEARS-A). Each assessment contains a set of statements that are rated (0 = Never, 1 = Sometimes, 2 = Often, 3 = Always). The SEARS-T includes 41 items (e.g. "Accepts responsibility when she/he needs to") which are divided into the subsections self-regulation (13 items), social competence (12 items), empathy (6 items), and responsibility (10 items). The SEARS-C includes 35 items (e.g. "I am good at understanding what other people think") and only has a total score with no subscales. The SEARS-A includes 35 items (e.g. "I am good at understanding the point of view of other people") and is divided into four subscales: self-regulation (8 items), social competence (10 items), empathy (11 items), and responsibility (6 items). Each subscale is scored and there is also a total score. As exemplified by the sample items provided, the items in SEARS-A are similar to the items of SEARS-C, except they reflect the perspective of the appropriate age of students.

Higher scores on all assessments are indicative of higher social-emotional competence and therefore higher scoring individuals are predicted to be more resilient than others with lower scores. Students with lower scores are considered to be at-risk and in need of additional support.

The SEARS assessments are psychometrically sound and show adequate levels of reliability and validity (Merrell, 2011). The SEARS-T, SEARS-C, and SEARS-A assessments have moderately high statistically significant convergent validity with other tests of social-emotional competence with correlations ranging from .62-.78 ($p > .01$), and demonstrated strong temporal stability through high test-retest reliability in multiple studies (SEARS-T coefficients at .90, SEARS-C ranging from .67 to .81, and SEARS-A from .80-.84, Nese et al., 2012; SEARS-T coefficients at .94 for the total score and ranging from .84 to .92. for the subscales, SEARS-C ranging from .73 to .81, and SEARS-A from .78 to .89, Romer and Merrell, 2013). Finally, all SEARS forms have strong internal consistency, with alpha values ranging from .80 to .98 (Merrell, 2011; Romer and Merrell, 2013). Internal consistency reliability based on the participants in this study was also high, with an alpha value for the initial administration of the SEARS- T of .98, and for the SEARS-C of .85. Similarly, alpha reliability coefficients for the second administration of the SEARS-T was .98 and the SEARS-A was .92.

Procedure

The STEP UP program was implemented over a 2-year period during an advisory class. In the first year (2013), four seventh grade middle school teachers from a local private school were randomly assigned to either an experimental (2 teachers) or control condition (2 teachers). During the second year of the program, students moved into the 8th grade and may have been assigned to a different teacher. However, all students assigned to the control group remained with one of the two eighth grade teachers in the control group, and all students assigned to the experimental group remained in a class taught by one of the two eighth grade teachers in the experimental group.

Over the two-year period, the two teachers assigned to the control group provided their students with the standard advisory period curriculum which consisted of group academic coaching, team building activities, and unstructured play.

The two teachers assigned to the experimental group provided the STEP UP curriculum to their students once or twice a week for 25 minutes each during the advisory period. The entire STEP UP curriculum was delivered each year, therefore the students received the program twice. In the first year, the STEP UP curriculum was implemented for eight weeks. In the second year, The STEP UP curriculum was implemented for twelve weeks. Flexibility was given to the teachers regarding the number of times a week the material was taught and total length of time of the program. However, all teachers in the experimental group provided the same curriculum, and the total number of hours the students were exposed to the curriculum was the same.

Teachers and students completed the SEARS assessments immediately before the STEP UP curriculum commenced in 2013, as well as immediately after the completed delivery of the STEP UP curriculum in 2014. The SEARS assessment completed by the students in the first year of the study was the SEARS-C and during the second year was the SEARS-A, due to the test's age requirements. Even though the SEARS-A is recommended for students in grade 7, at the start of

grade 7 most students in this study were 12 years old. Therefore, assessments were given based on the student's age and not grade level to ensure the items were age appropriate.

STEP-UP Teacher Training

For the current study, STEP UP training was first provided to school administrators and the head school counselor to approve the curriculum and study, and was then provided to the teachers who would implement the study with their students. The teachers in the experimental group attended four separate training sessions of 50 minutes each. The first training session explained how to administer the assessment tools. The second training session explained the importance of students obtaining social and emotional learning and suicide prevention. The third training session described STEP UP: its development, philosophy, and a brief overview of how the program works and the 8 Steps. The final training session explained how STEP UP is recommended to be taught, including rules students should adhere to, how to encourage participation among all students, using constructive guided feedback, reinforcement, and generalization, followed by an overview of the lesson plan structure and how to appropriately complete the lesson plan in the 25-minute period. The program developer and the lead research assistant conducted these training sessions.

Intervention Fidelity

Throughout the study, research assistants intermittently observed teachers in the treatment and control groups implementing the program. The research assistants in this study were all CITI certified and had at least 2 years of experience conducting research for 12-15 hours a week in a psychology research lab at the University of Nevada, Las Vegas.

In the first year, research assistants observed teachers ten times and in the second year they observed teachers three times. Research assistants used fidelity checks when observing the STEP UP curriculum implementation. The fidelity checklists ensured that 1) the delivery met the objectives of the lesson, 2) the delivery of the material was at least 25 minutes in length, 3) the curriculum was delivered during the allotted time, 4) all materials were organized and were provided to all of the students, 5) all of the students were given an equal chance to participate in the curriculum activities, 6) the teacher was open to students' ideas and addressed all of their concerns, 7) the students were given the opportunity to reflect on the current topic/assignment, and 8) the teacher provided an appropriate ending to the lesson. The fidelity checks completed showed that the teachers were following the STEP UP curriculum and completing all requirements.

Missing Data and Attrition

Throughout the two years in which this study was conducted, a total of 64 students were able to participate in some capacity, however 5 of these students did not fully participate in all aspects of the program during both years. In addition, despite 59 students participating in the entire study, there were different amounts of participants for each assessment. This happened for several reasons: some students were absent either when the pretest or posttest assessments were taken; some teachers did not fill out the pretest assessments or did not return the assessments to the researcher. In the results section, only students with complete data were included in the analysis and students with missing data were removed.

Analysis

Power calculations using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that 26 participants in each group were sufficient to detect a between-groups effect size of 0.4, with alpha set at 0.05 and power set at 0.80. T-scores (standardized scores) were analyzed for SEARS-C, SEARS-A, and SEARS-T subscales and total scores. To test for differences in the control group and treatment group at the start of the study, all baseline questionnaire scores were compared using *t*-tests, and gender was compared using a Chi Square test. To test for the effectiveness of the treatment group, *t*-tests were used for scores on all assessments. Statistical significance was evaluated for the scores on each assessment using *p*-values ($\alpha = .01$); practical significance was evaluated for the scores on each assessment using Cohen's *d* effect size estimates (Cohen, 1988). To determine effectiveness of the treatment group as compared to the control group, questionnaire scores at the end of intervention were compared using multivariate analysis of covariance to adjust for baseline scores. Data were analyzed using Statistical Package for Social Sciences. Data were analyzed by two independent researchers to increase the validity and reliability of the results.

RESULTS

A total of 59 students from an urban private school participated in the study for two years. The average age of the participants at the start of the study was 12.16 ($SD=.37$) and there were 33 male participants (52%) and 31 female participants (48%). The majority of the students in the study were Caucasian (72.6%) while the racial composition of the remaining students included Asian (9.7%), African American (4.8%), and Hispanic (3.2%). In addition, 4.8% self-identified as other and 4.8% preferred not to answer. While 59 students participated in the entire study, there were different amounts of participants for each assessment (Table 1).

Table 4. Assessment Completion

	2013 Pre -Test			2014 Post-Test		
	Total	Treatment	Control	Total	Treatment	Control
SEARS-C (pre)/ SEARS-A(post)	57	27	30	54	21	33
SEARS-T	59	27	32	59	25	34

Baseline Differences

T-tests were conducted to determine pre-program differences between the experimental and the control groups on all pre-assessment scores (Sears-C and Sears-T) and a chi square test was conducted to determine if there were gender differences. No significant between-group differences were detected by gender, however one significant difference was detected for the SEARS-T Social Competence subscale (Table 5). Therefore, this variable was used as a covariate in subsequent analyses.

Table 5. Baseline Differences in Gender and Outcome Measures

	Control		Treatment		<i>p</i> *
	18 (Female)	14 (Male)	11 (Female)	16 (Male)	
Gender					0.235
Pretest 2013 SEARS-T					
Self-Regulation (SR)	50.80	(8.74)	52.33	(7.37)	0.358
Social Competence (SC)	46.90	(11.14)	51.92	(9.24)	0.047
Empathy (E)	52.66	(9.79)	51.96	(9.08)	0.972
Responsibility (R)	49.13	(10.72)	50.48	(7.93)	0.411
Total	49.46	(9.80)	51.81	(8.57)	0.226
Pretest 2013 SEARS-C	47.63	(6.64)	49.40	(7.46)	0.346

**p* values using t-tests for outcome variables and Chi square for gender.

Treatment versus Control Group Outcome Comparison

Repeated measures t-test of differences, on the SEARS-Teacher version, demonstrated that in the treatment group, all areas of social emotional learning significantly improved while in the control group, only one area, Empathy, significantly decreased. However, on the SEARS youth version (SEARS-A), no differences were detected in either the treatment or the control group (Table 6).

Table 6. Comparing 2013 Pre-Test and 2014 Post-Test *T*-scores on SEARS Assessments

	Control					Treatment				
	Pre-Scores		Post-Scores		<i>p</i>	Pre-Scores		Post-Scores		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
SEARS-Teacher										
Self-Regulation	50.37	8.63	50.62	3.76	0.867	53.40	6.52	60.92	7.85	0.000
Social Competence	46.46	11.10	49.34	3.70	0.170	52.88	8.62	58.80	9.45	0.004
Empathy	51.87	9.97	47.25	4.57	0.005	53.44	7.42	59.24	9.07	0.009
Responsibility	48.40	10.76	45.75	4.28	0.151	51.84	6.46	57.68	7.86	0.000
Total	48.84	9.83	48.40	4.06	0.794	53.08	7.41	60.28	8.74	0.000
SEARS-Child/Adolescent										
Total	47.44	6.67	49.55	9.30	0.234	47.09	5.40	49.57	7.04	0.167

Multivariate analysis of covariance was conducted comparing difference scores in outcome measures between the treatment and control groups while controlling for pre-treatment difference in SEARS-T Social Competence subscale scores. There was a statistically significant difference in social and emotional learning, $F(1, 49) = 3.96, p < .0005$; Wilk's $\Lambda = 0.638$, partial $\eta^2 = .36$.

Follow-up analysis of covariance indicates that the program has a statistically significant effect on all SEARS-Teacher assessment subscales and total scale scores, but does not have an effect on the SEARS youth assessment (Table 6). To account for multiple ANCOVAs being run, a Bonferroni correction was applied such that statistical significance was set at $p < .025$.

Table 7. MANCOVA on 2013 Pretest and 2014 Posttest T-scores on SEARS Assessments

	SS	df	MS	F	p	η^2
SEARS TEACHER						
Self-Regulation	1155.47	1	1155.47	15.44	0.000	0.247
Social Competence	344.06	1	344.06	5.92	0.019	0.112
Empathy	1028.97	1	1028.97	11.21	0.002	0.193
Responsibility	1164.63	1	1164.63	20.87	0.000	0.308
Total	1033.73	1	1033.73	15.23	0.000	0.245
SEARS YOUTH						
Total	1.00	1.00	1.00	0.01	0.927	0.000

Note. Pre-test 2013 SEARS-Teacher Social Competence subscale as a covariate.

DISCUSSION

The results of this research show the STEP UP program to be an effective way to enhance social emotional skills in middle school youth and provide tools for youth to learn prosocial attitudes and lifelong positive coping skills. Thereby these tools increase overall protective factors, promote positive mental health, and help mitigate negative situations (CASEL, 2013; Wyman, 2014). Teacher ratings of students who participated in STEP UP showed a statistically significant improvement from the beginning to the end of the program, while scores of students in the control group remained relatively the same or declined over time. Students who participated in the program during both school years were shown to have increased their social and emotional competency skills, becoming more aware of their own emotions, and using more positive strategies when facing adverse situations. This suggests that for students to receive the full impact of the program, it should be implemented for at least two years in order for students to show significant results. Despite all of these benefits, there are some aspects of this study that should be considered when translating these results into future research.

Differences in SEARS Scores

Results of the administration of the SEARS assessments during this two year study revealed significant differences in SEL competency scores that were only captured by the SEARS-Teacher assessments, but not the SEARS youth assessments. While teachers were able to recognize significant improvements in SEL competencies in the students that participated in the STEP UP program, student self-reported scores did not show statistically significant improvement over time. This discrepancy has been found in previous, similar studies (Achenbach, McCounaughy, & Howell, 1987; Loeber, Green, & Lahey, 1990) and could be attributed to a number of reasons. First, the relatively small sample size and short term follow up may have contributed to the differences in scores. Also, previous research using the SEARS assessments has found similar differences. Cohn notes that teachers can provide a detailed perspective of their students based on the activities in which students engage – ones in which sustained attention is necessary, and “where students are forced to navigate a social environment comprised of many other children from different backgrounds” (Cohn, 2011). Because of the limited time and structured environment that teachers have to observe their students, teachers’ ratings are based only on what they observe while students are in school. Students, however, rate themselves based on all contexts in which they have

experiences and interactions. In that way, differences between teacher and student ratings can be reasonably expected. Additionally, cognitive development over time may change how children and adolescents perceive themselves and rate their behaviors (Ray et al, 2009). As assessment tools, the SEARS-C, SEARS-A, and SEARS-T are best used in combination with additional information to provide a more complete and comprehensive picture of a student's social and emotional competencies (Cohn, 2011; Winne & Perry, 2000; Zimmerman, 2008). This may be the best remedy for reconciling the large differences between teacher and student scores.

Limitations

Due to the small sample size of this research study and the lack of diversity of participants, results may not be generalizable to a larger and more diverse population. While treatment and control groups were kept separate over the 2-year course of program implementation, it is possible that lesson material or activities were discussed between students outside of class time. Any contribution made by the treatment groups (both students and instructors) to the improvement of the general school climate could have had some degree of impact on the students who did not receive the STEP UP program, however this is unavoidable as the students are in a shared environment and there was still a large statistically significant difference between the treatment group and control group in all four subcategories of the SEARS-T.

Recommendations

Again, the limited size and general homogeneity of the sample in this study make it so that results should be interpreted as potentially unique to this population. Recommendations for future research with STEP UP include the need for a larger and more diverse student population. Implementing the program in multiple schools and in multiple locations would be helpful in addressing this concern. Also, assessments conducted immediately after program implementation do not provide adequate information to assess the long term impacts of the program. Follow up assessments (for example, placed at 6 or 12 months after program implementation) would be able to help determine the effectiveness of the program in terms of retention of the SEL competencies gained. As implementation of the program grows, it is important to ensure fidelity to the program, therefore resources should be dedicated to sustain this element of the program. In a review of SEL programs in elementary school settings, Rimm-Kauffman and Hulleman caution against using SEL programs without fully utilizing all core components and adapting interventions (to address individual teaching styles or cultural differences) to the point that they lose their potency (Rimm-Kauffman & Hulleman, 2014).

As SEL becomes an increasing priority in education, it will be important to have tested and reliable practices that are available for schools to integrate with their curriculum. The Academic, Social, and Emotional Learning Act of 2015 (formerly of 2013; the first iteration died in Congress) was assigned to a Congressional Committee for review and seeks to amend Title II of the Elementary and Secondary Education Act of 1965. This amendment will mandate training for teachers and principals in practices that address the social and emotional developmental needs of students as part of the activities that are funded under the Teacher and Principal Training and Recruiting Fund program. If this act passes, it would allow funding for in-classroom instruction and school-wide initiatives that would help students acquire knowledge, attitudes, and skills that are most conducive

to social and emotional competency (Civic Impulse, 2016). STEP UP has shown to be effective as a tool for increasing the awareness and impact of social and emotional learning. With additional, rigorous research, STEP UP has the potential to prove to be a comprehensive and effective upstream preventative program, increasing students' skills in coping with negative experiences, and protecting young students against risk factors that could possibly lead to mental illness and suicide.

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Appendix A.

Curriculum Procedural Fidelity Checklist

Teacher's Name: _____

Evaluator's Name: _____

1.	The delivery met the objectives of the lesson.	
2.	The delivery of the material was at least 25 minutes in length.	
3.	The curriculum was delivered during the allotted time.	
4.	All materials were organized and were provided to all of the students.	
5.	All of the students were given an equal chance to participate in the curriculum activities.	
6.	Teacher was open to student's ideas and addressed all of their concerns.	
7.	The students were given an opportunity to reflect on the current topic/assignment.	
8.	The teacher provided an appropriate ending to the current lesson.	