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School Violence Prevention: Evaluating a Cognitive-Behavioral Intervention for Aggression Among Adolescents

A Thesis submitted in partial satisfaction
of the requirements for the degree of

Master of Arts

in

Education

by

Barbara Katic

March 2020

Thesis Committee:
Dr. Austin H. Johnson, Chairperson
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The Thesis of Barbara Katic is approved:

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Committee Chairperson

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ABSTRACT OF THE THESIS

School Violence Prevention: Evaluating a Cognitive-Behavioral Intervention for Aggression Among Adolescents

by

Barbara Katic

Master of Arts, Graduate Program in Education
University of California, Riverside, March 2020
Dr. Austin Johnson, Chairperson

Schools are held accountable for creating and maintaining safe learning environments for all students. The prevalence of behavior and conduct disorders, specifically aggression, remain problematic for school campuses. When a child's aggressive behaviors persist over time, the development of established patterns of violence become harder to modify later in life. Further, aggressive behaviors may be comorbid with symptoms of anxiety and depression. Thus, there is a need to implement effective and feasible school-based interventions in order to ameliorate these problems. One such program that has demonstrated effectiveness is *Creating Opportunities for Personal Empowerment* (COPE), an individually-administered intervention based in cognitive-behavioral therapy (CBT) principles. COPE promotes self-regulation and the development of coping skills for managing stress. In order to evaluate the COPE program, a single-case design study will be implemented for three adolescents with a history of aggressive behaviors. This study aims to assess the effects of COPE on

aggression, anxiety, and depression. It is hypothesized that the COPE program will (a) reduce aggressive behavior and (b) improve depression and anxiety symptoms among students.

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Introduction

Schools are considered to be safe learning environments for all students. However, problematic behaviors (e.g., aggression) remain prevalent on school campuses, and may escalate into violent incidents if left unaddressed (Larson & Mark, 2014). School violence interrupts the learning process and causes harm to students and the school community. Thus, it is imperative for schools to address behavior problems among students, particularly aggressive behaviors, in order to prevent school violence. Aggression may be broadly defined as a behavior that is intended to harm other people or things (Hadley, Mowbray, & Jacobs, 2017). When aggressive behaviors persist throughout the course of one's development, it may lead to established patterns of violence that are more challenging to modify later in life (David-Ferdon et al., 2016). Further, students with behavior/conduct problems may concurrently present symptoms of anxiety and depression (Ghandour et al., 2019).

Research has identified cognitive-behavioral therapy (CBT) as an effective treatment for behavioral and emotional disorders, including aggression, anxiety, and depression (Mayer & Van Acker, 2009). There are various CBT-based interventions that have been implemented with success in school settings. Specifically, *Creating Opportunities for Personal Empowerment* (COPE) has been identified as an intervention that has improved mental health outcomes for students and reduced disruptive behaviors (Lusk & Melynk, 2011; Melynk, Kelly, & Lusk, 2013; Melynk, Kelly, & O'Haver, 2015). COPE is a 7-session CBT-based program that was developed as a response to the increasing rate of mental health disorders among youth (Melnyk, 2003). COPE programs

are designed to teach children and adolescents to reduce negative thoughts, increase healthy behaviors, and improve communication and problem-solving skills (Cope2Thrive LLC, 2019).

The proposed study seeks to evaluate the effectiveness of the COPE program in (a) reducing aggressive behaviors among students, and (b) improving depression and anxiety symptoms among adolescent students within a school setting through a single case design method. First, it is hypothesized that the implementation of the COPE program will reduce aggressive behaviors for all students, as measured through direct observation methods. Second, it is hypothesized that the COPE program will improve mental health outcomes for students, as measured through self-report ratings on anxiety and depression measures. Lastly, it is hypothesized that the COPE program will be rated as a valuable, positive experience for students, their families, teachers, and COPE program instructors.

Review of Literature

School Violence Prevention

Schools are expected to foster safe learning environments for all students. However, problematic behaviors that are prevalent in schools (e.g., bullying, teasing, and aggression) may escalate into violent incidents if left unaddressed (Larson & Mark, 2014). School violence not only disrupts the learning process, but also causes harm to students, schools, and the broader community (Centers for Disease Control and Prevention [CDC], 2020). Therefore, it is imperative for schools to take action in preventing school violence. While there is not one single solution to prevent school

violence (David-Ferdon et al., 2016), there are concrete strategies that schools may implement. The CDC recommends several strategies for reducing youth violence, including: (a) the treatment of problem behavior to lessen harm and prevent future risk, and (b) strengthening skills among youth through school-based programs (David-Ferdon et al., 2016).

Targeting Problem Behavior: Aggression

Between 13-20% of children in the US are identified as having a mental, emotional, or behavioral disorder each year (CDC 2013). Behavior/conduct problems among children, specifically behaviors of aggression, present challenges for children and adults. Aggression may be broadly defined as a behavior that is intended to harm other people or things (Hadley, Mowbray, & Jacobs, 2017). Physical aggression may be common in early childhood, yet by the time children reach elementary school, the majority of children have learned alternative, prosocial ways to resolve conflict and express themselves (David-Ferdon et al., 2016). However, some children continue to present aggressive behaviors. If these behaviors are not addressed, they may persist and increase over time, leading to established patterns of violence that are harder to modify later in life (David-Ferdon et al., 2016).

Middle school demonstrates a time in early adolescence where aggression occurs more frequently, as evidence suggests that aggressive behaviors may peak during Grades 7-9 (Farrell, Henry, Schoeny, Bettencourt, & Tolan, 2010). An increase in aggressive behaviors during this developmental period highlights a need to better understand them (Farrell, Henry, Schoeny, Bettencourt, & Tolan, 2010). Students engaging in aggressive

behaviors present a risk of harm (whether emotional and/or physical) to oneself and others, and are more likely to be suspended or expelled from school (Losen, Ee, Hodson, & Martinez, 2015). Further, students with emotional and behavioral disorders are more likely to experience academic failure, school dropout, incarceration, and unemployment (Kauffman & Landrum, 2018).

Comorbidity with Anxiety and Depression. Students with behavior/conduct problems may also concurrently demonstrate symptoms of anxiety and depression. Indeed, 36.6% of those diagnosed with behavior/conduct problems also present anxiety (Ghandour et al., 2019). Anxiety is defined as the anticipation of a future threat, and is often associated with cautious, avoidant, or vigilant behaviors (APA, 2013). Anxiety among children and adolescents may present itself as fear, worry, fatigue, irritability, and/or anger (CDC, 2019). Symptoms of anxiety in childhood may develop into anxiety disorders, which share features of excessive fear and anxiety (APA, 2013).

Additionally, 20.3% of students diagnosed with behavior/conduct problems also present with depression (Ghandour et al., 2019). Depression among children and adolescents may present itself as persistent sadness and hopelessness (CDC, 2019). Symptoms may include irritability, loss of enjoyment in activities, difficulty paying attention, and changes in eating or sleeping patterns (CDC, 2019). Children with these symptoms may be diagnosed with depressive disorders, which involve a "sad, empty, or irritable mood" and leads to impairment in one's daily functioning (APA, 2013). These non-zero percentages of comorbidity highlight the link between behavioral/conduct

problems, depression, and anxiety among children, thus identifying the potential benefit of treating multiple disorders simultaneously.

Strengthening Skills Through School-Based Intervention

Schools have traditionally relied on zero-tolerance policies (e.g., suspensions, expulsions) as a response to aggressive behaviors among students within school campuses (American Psychological Association [APA] Zero Tolerance Task Force, 2008). However, research has deemed these policies as ineffective, as they perpetuate negative student outcomes and strengthen the school-to-prison pipeline (APA Zero Tolerance Task Force, 2008). Thus, schools are shifting towards providing interventions for these behaviors while simultaneously including students in the classroom.

Targeting aggressive behaviors through school-based intervention has been shown to strengthen prosocial skills among students and foster safe learning environments. Caprara and colleagues (2015) evaluated the long-term effects of a school-based program designed to (a) promote prosocial behaviors and (b) counteract physical aggression among middle school students. Students were either assigned to the intervention or control group, with each group evaluated at three time points (pretest, posttest, and 18-month follow-up). Results indicated that students who received the intervention had increased prosocial behaviors and decreased physical aggression when compared to the control group (Caprera et al., 2015). Further, students receiving the intervention had obtained higher grades by the end of middle school (Caprera et al., 2015). Although the school-based program was designed for improving behavior outcomes, there was a subsequent improvement in academic outcomes. Moreover, these outcomes were

sustained long-term. Thus, the implementation of school-based intervention for reducing aggressive behaviors may guide students on a path towards positive life outcomes, both socially and academically.

Cognitive-Behavior Therapy (CBT) For Aggression in Schools

Given the negative outcomes associated with aggression among students, it is critical to select an intervention that has demonstrated effectiveness. There are various ways to address aggressive behaviors in school settings. Research has identified cognitive-behavioral techniques as evidence-based, both in clinical and school settings. Interventions based on cognitive-behavioral therapy (CBT) principles have demonstrated effectiveness for improving mental health outcomes for students in school settings, particularly for anger/aggression, anxiety, and depression (Mayer & Van Acker, 2009).

Cognitive-behavioral strategies have the underlying assumption that overt behaviors are mediated by cognitive events, and that individuals can learn how to influence these cognitive events in order to change their own behaviors (Daunic et al., 2006). CBT may be defined as "a purposeful attempt to preserve the demonstrated positive effects of behavioral therapy within a less doctrinaire context and to incorporate the cognitive activities of the client into the efforts to produce therapeutic change" (Kendall, 1993, p. 235). In other words, CBT is guided by a combination of behavioral and cognitive theories of human behavior (Benjamin et al., 2011). Moreover, it is an integration of behavioral, affective, social, and contextual strategies in order to elicit individual change (Kendall, 1993). Examples of CBT strategies include conditioning, modeling, cognitive restructuring, problem solving, and the development of coping

strategies (Benjamin, Puleo, Settipani, Brodman, Edmunds, Cummings, & Kendall, 2011).

Evidence Supporting CBT

There are many examples of cognitive-behavioral interventions being applied to classroom settings. For instance, Daunic and colleagues (2006) developed and implemented a cognitive-behavioral classroom-based intervention titled *Tools for Getting Along* (TFGA). They found that exposure to TGFA significantly increased knowledge of problem-solving concepts and decreased teacher ratings of students' proactive and reactive aggression. In contrast, while there were positive changes in student behavior, they did not find a significant change in students' self-reports of anger expression (Daunic et al., 2006). In summary, teaching students cognitive strategies decreased disruptive/aggressive behaviors, strengthened pro-social behaviors, increase social cognition, and improved peer relationships (Daunic et al., 2006).

Another study by Parker, Zaboski, & Joyce-Beaulieu (2016) investigated the application of school-based cognitive-behavioral therapy for an individual Grade 8 male student. The treatment was applied in order to address ADHD, oppositional behaviors, and explosive anger at the middle school level. The cognitive strategies applied included the following techniques of cognitive restructuring: (a) introducing the cognitive-behavioral triad, (b) helping to identify the difference between thoughts, emotions, and behaviors, (c) teaching the student about automatic thoughts, and (d) evaluating thinking patterns (i.e. consequences, rationality; Parker et al., 2016). Outcomes included a decline in office discipline referrals, lower levels of aggressive symptoms, increases in prosocial

classroom behaviors, and maintained improvement in the following school year (Parker et al., 2016).

Sukhodolsky, Kassinove, & Gorman (2004) conducted a meta-analysis to evaluate the effects of CBT for anger-related problems among children and adolescents, using a sample of 21 published and 19 unpublished outcome studies. Four subtypes of CBT interventions were identified and differentiated through the meta-analysis: (a) skills development (e.g., modeling, behavioral rehearsal), (b) affective education (e.g., self-monitoring, relaxation techniques), (c) problem-solving (e.g., self-instruction, consequential thinking), and (d) eclectic or multimodal treatments (e.g., using multiple procedures, targeting two or more components of anger). Among subtypes, skills development and eclectic/multimodal treatments were found to be significantly more effective than affective education, suggesting that treatments focused on teaching actual behaviors are more effective than treatments which aim to modify internal constructs. Overall, the mean effect size of all CBT interventions was reported to be in the medium range (Cohen's $d = 0.67$). Thus, the results of the meta-analysis suggest that CBT is an effective response for treating aggression among children.

Creating Opportunities for Personal Empowerment (COPE)

Interventions grounded in CBT principles have demonstrated success when implemented in school settings, particularly for students who engage in aggressive behaviors. Evidence suggests that one such intervention based on CBT principles, *Creating Opportunities for Personal Empowerment* (COPE), may improve mental health outcomes for students. COPE is a 7-session manualized cognitive-behavioral program for

children and young adults. The COPE program is designed to reduce negative thoughts, increase healthy behaviors, improve communication skills, and improve problem-solving skills (Cope2Thrive LLC, 2019). COPE incorporates several key components of CBT, including cognitive restructuring, self-monitoring, problem solving, and behavior activation (Melnyk et al., 2015). The ABC model (Activator event, Belief that follows, and Consequence of the beliefs) is emphasized throughout the COPE program (Melnyk et al, 2015). Overall, the program is expected to help children and adolescents feel emotionally better and behave in healthy ways (Cope2Thrive LLC, 2019).

COPE was initially developed by Bernadette Melnyk, a nurse practitioner, during her work with adolescents in an inpatient psychiatric setting (Melynk, Kelly, & Lusk, 2013; Lusk, Abney & Melynk, 2018). There are four different programs of COPE available, including: Child (7-11 years), Teen (11-18 years), Young Adult (18-24 years), and Healthy Lifestyles TEEN (11-18 years). COPE has been implemented and evaluated across its four programs and across a variety of settings (including college campuses, K-12 schools, and community mental health centers). The COPE program may be delivered in school settings or healthcare systems, and each session consists of skills-building activities that may be completed within 25-30 minutes (Melnyk, 2003). COPE may be implemented by a variety of practitioners (e.g., teachers, psychologists, counselors, nurses, doctors) once they complete the online instructor training program (Melynk, 2003).

Evidence Supporting COPE

There are numerous intervention studies conducted on COPE which indicate positive effects on levels of depression, anxiety, disruptive behaviors, and healthy lifestyle choices (Lusk & Melynk, 2011; Melynk, Kelly, & Lusk, 2013; Melynk, Kelly, & O'Haver, 2015). The COPE program has been implemented and evaluated through a variety of settings, including college campuses, K-12 schools, and healthcare settings. Research conducted on COPE within each of these settings is summarized below.

Healthcare Settings. Numerous studies have been conducted with COPE within a healthcare setting. First, Erlich, Dillion, and Becker (2019) evaluated the effects of COPE (Teen program) for thirty-seven patients. Pre- and post-intervention measures included questionnaires on depression and anxiety, and were evaluated through paired t-tests. Results demonstrated improved scores on depression and anxiety measures. Further, participants expressed satisfaction with COPE, and the authors recommend increased availability of COPE to improve care for adolescents. Second, Lusk & Melnyk (2011) delivered the COPE program to fifteen depressed adolescents in 30-minute mental health medication management outpatient visits. A pre-experimental one group pre- and post-test design was conducted. The authors found that the COPE program for depressed teens significantly reduced anger symptoms from pretest to posttest, as measured by self-report on the Beck Anger Inventory.

College Settings. COPE has demonstrated effectiveness for treating depression and anxiety among college students. Melnyk, Amaya, Szalacha, Hoying, Taylor, and Bowersox (2015) conducted a randomized controlled trial to evaluate the effectiveness of

the online version of COPE with 121 college freshmen. While there were no significant differences in anxiety and depression between the control group and the intervention group, there was a significant decline in symptoms for students who had elevated anxiety symptoms prior to beginning the COPE intervention. Findings indicate that the COPE program may be particularly beneficial for college students with current anxiety symptoms.

Further, Hart Abney, Lusk, Hovermale, and Melnyk (2019) sought out to evaluate the effects of COPE for identified "at risk" college students. A one group pre- and post-test design was used for the study. Results indicated improvement in depression and anxiety symptoms as measured by the Beck Depression Inventory-II (BDI-II) and State-Trait Anxiety Inventory, respectively. The authors suggest that a decrease in these symptoms may also lead to improved academic performance.

K-12 School Settings. While COPE has been primarily evaluated in college and healthcare settings, there is evidence suggesting the intervention is effective for K-12 settings. Melnyk, Kelly, & Lusk (2014) evaluated the COPE program for sixteen adolescents identified by a school-based nurse practitioner as having depression and/or elevated anxiety symptoms. A one-group preexperimental pre- and posttest design with post-intervention and 4-week follow up was conducted. COPE was delivered by a nurse practitioner in a group-based format within two high schools. Paired-sample *t* tests were conducted to evaluate the COPE program on anxiety, depression, and personal beliefs. Depression and anxiety symptoms were measured using the Beck Youth Inventory: Second Edition. Personal beliefs were measured through a Personal Beliefs Scale, a 10-

item instrument designed to tap into one’s beliefs and confidence regarding the ability to manage stress and cope effectively. Results indicated a significant decrease in depression scores from pre- to post-intervention, and from pre-intervention to the 4-week follow up. There was also a significant decrease in anxiety scores from pre- to post-intervention. Further, there was a significant increase in personal beliefs from pre- to post-intervention.

Statement of the Problem

Although a substantial amount of evidence has been collected to suggest the effectiveness of COPE, no research to date has examined its effectiveness in reducing aggressive behaviors in K-12 school settings. Given the importance of addressing aggressive behaviors to prevent school violence, the effectiveness of COPE in reducing aggression will be evaluated. Moreover, no intervention to date has evaluated COPE through direct observation measures. Previous research on COPE has primarily relied on pre- and post-tests using self-report measures, which may be subject to bias and distortion (Kazdin, 2011). In contrast, direct assessment of overt behavior, such as aggression, may provide a more objective measurement when compared to self-report measures. In response, the purpose of this study is to utilize a single-case design method in order to evaluate the effectiveness of a CBT-based intervention, COPE, for (a) reducing aggressive behaviors and (b) improving depression and anxiety symptoms among adolescent students within a school setting.

Hypotheses

Hypothesis #1: The implementation of the COPE program will reduce aggressive behaviors for all students, as measured through direct observation.

Hypothesis #2: The implementation of the COPE program will improve mental health outcomes for students, as measured through anxiety and depression ratings.

Hypothesis #3: The COPE program will be rated positively by students, parents/guardians, and teachers.

Method

Participants

The study will include three students attending a public middle school in California, ranging from Grades 6-8. All three participants must be served through the general education curriculum, with no history of prior intervention(s) targeting aggressive behavior. Therefore, students that are being served through the special education curriculum will not be included in this study. A contract/memorandum of understanding between the researcher and participating school district will be completed prior to implementation of the study.

Screening Procedure

Potential participants will undergo a screening process in order to determine eligibility for this study. All three participants must demonstrate present levels of elevated aggression. First, teachers of the participating middle school will nominate up to three students that have demonstrated aggressive behaviors in the classroom. The teacher-nominated students must not be receiving services through the special education curriculum. Once these students have been nominated, teachers will be provided with the The Behavior Assessment System for Children - Third Edition (BASC-3; Reynolds & Kamphaus, 2015). Specifically, the BASC-3 Behavioral and Emotional Screening System

(BESS). The BASC-3 BESS is designed to identify risk areas of behavioral and emotional functioning (Altmann, Reynolds, Kamphaus, & Vannest, 2017). The teachers will complete the BASC-3 BESS rating scales for the students they have nominated. Each form provides a Behavioral and Emotional Risk Index (BERI) which indicates the level of risk the child has for developing a behavioral or emotional problem (Altmann et al., 2017). The BERI includes the categories of "normal risk" (T = 20-60), "elevated risk" (T = 61-70) or "extremely elevated risk" (T = 71 or higher; Altmann et al., 2017). The form includes an Externalizing Risk Index, which specifically assesses levels of aggression. The three students who have obtained the highest scores on the Externalizing Risk Index will be selected for study participation. Consent for study participation will be obtained from students and their families.

Setting

This study will be conducted in a low-income community, as research demonstrates that students from low socioeconomic backgrounds benefit the most from school-based interventions targeting aggression (Wilson & Lipsey, 2007). The school will be selected based on a Title 1 classification, which may be determined via the National Center for Education Statistics search page. This classification indicates that the school is serving a high percentage of students from low-income families. The intervention will take place in an available classroom during the students' advisement period (in order to avoid disruption to core classroom instruction), and will be implemented by the researcher. The researcher will require no alterations to the classroom setup or daily routine.

Response Measures

Aggressive Behaviors

The primary response measure in this study will be the percentage occurrence of aggressive behaviors. Aggressive behavior will be operationally defined as: (a) defiant noncompliance (e.g., refusing to sit in seat when asked), (b) blaming others (e.g., verbally blaming another student for losing a team-based game), (c) physically assaulting peers or school staff (e.g., hitting, throwing, kicking), (d) verbally threatening or assaulting peers or school staff (e.g., threatening to hurt another student), and (e) destroying property (e.g., ripping pages out of a textbook).

Depression and Anxiety

Supplementary procedures will be taken to evaluate changes in both depression and anxiety symptoms. In single-case design, while the primary outcome measure must be continuous and ongoing, supplementary, exploratory measures may also be included (Kazdin, 2011). Thus, anxiety and depression will be measured in the form of pre- and post-tests and will be descriptively reported.

First, in order to evaluate depression, the Children's Depression Inventory 2nd Edition (CDI 2; Kovacs, 2014) will be administered both pre- and post-intervention. The first edition of the CDI was developed by Kovacs and Beck (1977) to measure depressive symptoms in children and adolescents (Smucker, Craighead, Craighead, & Green, 1986). The second edition, the CDI 2, consists of 27 self-report items that are used to measure the severity of depression symptoms in children and adolescents ages 7-17 years old (Kovacs, 2014). Prior to administering the CDI 2, the researcher will coordinate with the

school counselor to develop a follow-up plan for any students who indicate suicidal thoughts or tendencies on the measure.

Second, to evaluate levels of anxiety, the Screen for Child Anxiety Related Disorders (SCARED) will be administered to the participating students. The SCARED: Child Version is a self-report form that is used to screen for signs of anxiety among children (Birmaher, Khetarpal, Cully, Brent & McKenzie, 1995). The SCARED consists of 41 items rated on a 3-point Likert scale (Birmaher, Brent, Chiapetta, Bridge, Monga, & Baugher, 1999). The instrument consists of five factors: panic/somatic, generalized anxiety, separation anxiety, social phobia, and school phobia (Birmaher et al., 1999). The total score and each of the five factors have demonstrated good internal consistency and discriminant validity (Birmaher et al., 1999). The pre- and post-test scores for the CDI 2 and the SCARED will be descriptively reported.

Observation Recording Procedures

Direct Observation

Two school psychology graduate students, with training in behavior observations, will collect observation data. Data collection will take place during for each of three participants during an advisement or elective period. Baseline performance of aggressive behaviors will be collected for each participant two times per week, for a minimum of two weeks, until a stable rate of aggressive behavior has been reached. Thus, a minimum of four baseline observations will occur for each participant. Once the COPE intervention is introduced for each participant, direct observations will be ongoing (two times per week). Data collection will be completed once each participant has received all seven

sessions of the COPE program. It is estimated that the total observation process will last between 10-12 weeks.

Data Collection

A partial interval recording data collection system will be used to observe and record aggressive behavior. Partial interval recording is particularly useful for behaviors that occur at a low rate, behaviors of inconsistent duration, and for targeting behaviors to decrease through intervention efforts (Hintze, Volpe, & Shapiro, 2002). Through partial interval recording, the occurrence of the behavior is scored if it occurs during any part of the interval (Hintze, Volpe, & Shapiro, 2002). For this study, a data collection sheet will be developed by the researcher, and will consist of 15-second intervals for each 30-minute observation period. The observers will indicate a plus sign (+) if an aggressive behavior occurred during a 15-second interval, and a zero (0) will be used to indicate a nonoccurrence of aggressive behavior during the interval. A data summary will be included on the data collection sheet, including the total number of intervals of occurrence/nonoccurrence, and percent of intervals of occurrence/nonoccurrence.

Interobserver agreement. Interobserver agreement (IOA) will be collected from the two graduate students on 20% of all baseline conditions and intervention conditions. The two students will observe the behaviors for each student at the same time (while recording observations independently), and then compare observations when the period is over. Agreement between observers will help determine whether the behavior is well-defined, or if the operational definition of aggression will need to be clarified or adjusted. IOA will help evaluate whether the definition provided is objective, clear, and complete

(Kazdin, 2011). Each student will be observed for three days during the baseline phase. IOA will be analyzed using kappa (*k*). Kappa provides an estimate of agreement between observers that is corrected for chance based on the observed frequency of occurrence and nonoccurrence intervals (Kazdin, 2011). When kappa is greater than .70, it will be considered an acceptable agreement, based on Kazdin's guidelines for single-case research designs (Kazdin, 2011).

Experimental Procedures

Materials

The 7-session manualized COPE Teen Program (11-18 years) will be implemented for this study. The 7-session COPE Teen Program must be purchased online directly through the COPE website (Cope2Thrive LLC, 2019). The cost of the 7-session COPE Teen Program package is $385 per instructor for the first year, and the package may be annually renewed for $250 (Cope2Thrive LLC, 2019). The contents of the 7-session COPE Teen Program package include: the instructor online training, a one-year delivery license (issued to the instructor following completion of the online training), a copy of the instructor's manual, five student manuals, and follow-up consultation with a COPE trainer (Cope2Thrive LLC, 2019). As one student manual is required for each student, licensed instructors may purchase additional student manuals directly through the COPE website. For the 7-session Teen Program, each student manual purchased separately costs $20 (approximately $2.86 per session) (Cope2Thrive LLC, 2019).

Instructor Training. The COPE program is designed to be implemented by a variety of practitioners, including nurses, psychologists, teachers, and counselors. For this

study, the 7-session COPE Teen program will be implemented by a doctoral graduate student in school psychology. A series of steps must be taken prior to implementation of the program. According to the COPE website, three sequential steps must be completed before delivering the program: (1) successful completion of the online instructor training, (2) completion of a practice program delivery, and (3) issuance of a program delivery license (Cope2Thrive LLC, 2019).

First, the training process for the instructor will be completed online. The training module takes approximately 2.5 hours to complete, and is followed by a 20-question multiple-choice assessment. The instructor must obtain a passing score of 80% or greater in order to deliver the program and order manuals. The training module may be as many times as necessary, and the quiz may be retaken until a passing score is obtained. Second, the instructor is required to complete a practice delivery session of the COPE program, which may be delivered to a family member or friend (Cope2Thrive LLC, 2019). Once the practice session has been completed, a 'Practice Delivery Results Form' is completed online. The form requests information regarding the session, including feedback and questions regarding the COPE program. Third, once the form is reviewed by a COPE administrator, a one-year program delivery license is issued to the instructor. The graduate student will complete all three steps (training, practice delivery, and licensure) prior to implementation of the COPE program with study participants.

Session Content

The 7-session COPE Teen program consists of manualized sessions covering the following topics: Session 1: Thinking, Feeling and Behaving: What is the Connection?;

Session 2: Thinking, Feeling and Behaving/Positive Self Talk; Session 3: Stress and Coping; Session 4: Problem Solving and Setting Goals; Session 5: Dealing with Your Emotions in Healthy Ways Through Positive Thinking and Effective Communication; Session 6: Coping and Stressful Situations; and Session 7: Pulling It All Together for a Healthy You (Cope2Thrive LLC, 2019).

Each session is based on CBT principles, and is taught to the student by the COPE instructor individually. The sessions are designed to help adolescents dealing with anxiety, stress, and/or depression by teaching cognitive-behavioral skills for (a) reducing negative thoughts and (b) developing positive thoughts and behaviors (Cope2Thrive LLC, 2019). The 'thinking, feeling, behaving triangle' is emphasized throughout the sessions, teaching students that their thoughts directly impact their feelings and behaviors (Melnyk, Kelly, & Lusk, 2013). The program is delivered using standardized manuals and concepts in order to ensure that all components of CBT, regardless of the instructor implementing the program, are covered during the sessions.

Program Implementation. The COPE program will be implemented for each student during one period of the school day. Each session will occur once per week and will last for approximately 25-30 minutes (7 weeks total). The selected school period will depend on the schedule for each student, however, it is preferable that the program will be implemented during an advisement or elective period (in order to prevent the students from missing any core academic instruction). The scheduling decision will occur in collaboration between the COPE instructor, student, teachers, school administration, and parent/guardians.

Treatment Integrity. As COPE is a manualized program, the COPE instructor must adhere to the instructor's manual for each session. In order to hold the instructor accountable for adherence to the manual, student workbooks will be checked by another school psychology doctoral student. The doctoral student conducting the treatment fidelity checks will have completed COPE instructor training and will be familiar with the COPE intervention. The instructor will hide any identifiable information on the student workbook prior to submitting them for treatment fidelity checks.

Research Design

A multiple-baseline-across-individuals design, as outlined by Kazdin (2011), will be utilized to determine the effects of the COPE intervention on aggressive behaviors, anxiety, and depression. Baseline and intervention data will be taken on all three participants. As levels of aggression for each student reach a stable rate during the baseline phase, the intervention, COPE, will be applied to one student, while the baseline phase continues for the remaining two students. For the student that has received the COPE intervention, levels of aggression are expected to decrease, while the levels of aggression for the two remaining students are expected to continue at baseline levels. Once levels of aggression stabilize for all students, the COPE intervention is extended to another student, and the procedure is continued until all three students receive the COPE intervention. Lastly, the intervention effect will be demonstrated once a change in levels of aggression is obtained at the point when the COPE intervention was introduced. Visual inspection will be conducted to judge the extent of changes in the

following domains: (a) changes in mean across phases, (b) changes in level across phases, (c) changes in trend or slope, and (d) latency of change.

Social Validity

Social validity of the COPE intervention will be evaluated through the participants, their parent/guardian, and teachers. First, students themselves will be asked to evaluate the COPE intervention. This may be done through the use of a rating scale form that is developed by the researcher. Questions will be adapted from previous studies evaluating the COPE intervention. Second, the parent/guardian's input may be sought to see if the intervention generalized to the home setting. A take-home (or online) survey may be developed by the researcher and provided to parent/guardian following intervention implementation. Third, teachers will be provided with a survey to evaluate whether the intervention effects were visible in their classrooms.

Conclusion

It is imperative for schools to prevent aggressive behaviors among students from escalating into violent incidents. School violence interrupts the learning process and causes harm to students and the school community. In order to prevent school violence, it is recommended that schools: (a) intervene through the treatment of problem behavior, and (b) strengthen skills among youth through school-based programs (David-Ferdon et al., 2016). The COPE program addresses both strategies of violence prevention. Previous research indicates that the COPE program provides potential for treating aggression, depression, and anxiety. Further, COPE sessions are grounded in skills-building activities for students.

This study aims to support school violence prevention efforts through the implementation and evaluation of a CBT-based intervention, COPE, through a single case design method. It is hypothesized that, following a stable baseline period, and subsequent introduction of the COPE intervention, participants will demonstrate (a) reductions in aggressive behaviors, and (b) improvements of depression and anxiety symptoms. First, it is expected that all three students will demonstrate significant reductions of aggressive behaviors. Second, it is anticipated that descriptive results will show significant decreases in depression and anxiety mean scores from pre-intervention to post-intervention. Lastly, it is anticipated that the COPE intervention will be rated positively by students, parents/guardians, and teachers. Overall, it is expected that this study will promote the implementation of evidence-based, effective, inclusionary intervention practices for students with aggressive behaviors, and will subsequently help to dismantle the school-to-prison pipeline.

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