INVESTIGATING THE IMPACT OF TOO GOOD FOR VIOLENCE: A SCHOOL-BASED VIOLENCE PREVENTION PROGRAM FOR MINORITY MALES

by

Madison Greene

A thesis submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Master of Science in
Criminal Justice

Charlotte

2018

Approved by:

_____
Dr. Michael Turner

_____
Dr. Shelley Listwan

_____
Dr. M. Lyn Exum

ABSTRACT

MADISON GREENE. Investigating the impact of Too Good for Violence: A school-based violence prevention program for minority males. (Under the supervision of DR. MICHAEL TURNER)

In response to increasing concern over school crime and violence, a variety of efforts have been implemented to target this issue. Prevention programs, aimed at reducing risk factors associated with violence and enhancing protective factors, are one method that have been implemented in schools. One such program, Too Good for Violence (TGFV), is a character education program designed to teach prosocial attitudes, beliefs, and behaviors. This program's goals are based around previous literature suggesting that knowledge, attitudes, and school climate are important factors regarding future involvement in violence for youth. The present study is an evaluation of TGFV in Cabarrus County, North Carolina. The results demonstrated that the program was effective at increasing student knowledge, but was not responsible for changes in attitudes or intentions to engage in violence. This program was also effective at improving dimensions of the school climate. Recommendations for future research are discussed.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1: INTRODUCTION

Since rates of violence peaked in the mid-1990s, the United States has endured a two-decade decrease in crime (Friedman, Grawert, & Cullen, 2017). School violence has been no exception to this decline. From 1992 to 2014, the number of students who were victims of crimes at school declined by eighty-two percent (Zhang, Musu-Gillette, & Oudekerk, 2016). In 1992, there were approximately 181 criminal incidents per 1,000 students, whereas in 2014 there were 33 incidents per 1,000 students (Zhang, Musu-Gillette, & Oudekerk, 2016). Upon disaggregating the total victimization rate, significant decreases in the trends for thefts, violence, and serious violent victimizations also emerged. In terms of self-reports, the percentage of students aged 12-18 who reported a violent victimization during the previous six months decreased from three percent in 1995 to one percent in 2015; reports of serious violent victimization decreased from one percent to less than one-half of one percent during this twenty-year period (Musu-Gillette, Zhang, Wang, Zhang, & Oudekerk, 2017). It should be noted that the observed decreases were not confined to a specific demographic group. Rather, the decreases in crime and victimization were evident for both sexes, across various races and ethnicities, for all grades 6 through 12, and across urban, suburban, and rural schools (Musu-Gillette et al., 2017).

Although it is a very rare event, it must be acknowledged that death is the potential result of school violence. The percentage of youth homicides occurring at school remained at less than three percent of the total number of youth homicides between the 1992-93 school year and the 2013-14 school year (Musu-Gillette et al., 2017). During the 2013-2014 school year, the violent death rate at school was approximately one student homicide or suicide for every 2.8 million students enrolled (Musu-Gillette et al., 2017). Therefore,

the statistics show that school crime has been decreasing since the 1990s, and schools remain a relatively safe space for youth, with an overwhelming majority of homicides occurring outside of school.

Despite the safe environment that schools offer, concern over violence in schools and student safety remains high. A recent Gallup poll showed that 28 percent of U.S. parents were concerned for their children's physical safety at school (Auter, 2016). School safety was among Americans' top crime concerns, with 26 percent of respondents reporting they worry about having a school-aged child physically harmed attending school (Reinhart, 2017). Additionally, approximately one in eight students express fear for their own safety on school grounds, which is the highest level of fear recorded since 2001 (Auter, 2016).

In response to public concern over school violence, several strategies have been implemented to assuage these concerns. Burns and Crawford (1999) describe the chain of events that occur particularly after a highly-publicized event, such as a school shooting. That is, the public becomes concerned, the media intensely covers the event, the public concern grows larger, action from government officials is demanded from the public, representatives react by taking a tough stance on the issue, then the media covers this tough stance which serves to further exacerbate public perception about the issue. This tough stance taken by politicians and government officials has influenced public policy by supporting both punitive and non-punitive approaches to curbing violence in schools (Cook, Gottfredson, & Na, 2010). One example of a punitive approach are zero tolerance policies, originally intended to prevent serious offenses such as possession of firearms, but are now applied to other instances, such as fighting (Martinez, 2009). The empirical evidence on these policies is growing, and studies often show that it leads to overuse of

suspensions and expulsions, rather than preventing crime and violence (Martinez, 2009). Due to these policies not having the intended consequences, other methods have been created to prevent violence within schools.

Prevention programs are an example of a non-punitive, rehabilitative approach to violent offending that has gained popularity in schools. Prevention models can be school-wide universal interventions or may be more intensive where they target at-risk students. There are a variety of prevention and intervention programs that have been implemented in schools. One example is prevention through education and social skill development. Research has demonstrated that providing social skill development to students can be a protective factor against problematic behaviors and a lack of school success (Kilian & Kilian, 2011).

The *Too Good for Violence* (TGFV) program is a rehabilitative prevention program that seeks to educate students and build skills to resist the temptation of engaging in violence. TGFV was established by the C.E. Mendez Foundation, which seeks to prevent violence through the development and delivery of educational programs. TGFV aims to promote violence prevention through character education, which promotes a caring approach to prevention, including conflict resolution, anger management, respect for self and others, and effective communication. Interactive games, role-plays, and visual aids are utilized to teach the social-emotional skills needed for success. Additionally, this program promotes character development by strengthening eight key character traits: (1) caring, (2) cooperation, (3) courage, (4) fairness, (5) honesty, (6) respect, (7) responsibility, and (8) self-discipline. The expected long-term outcome of the program is to decrease instances of violence by resolving conflicts peacefully in students exposed to the program.

Intermediate, or more proximate outcomes include: (1) improved social emotional competence and media literacy skills, (2) more students perceiving violence as wrong, risky, or harmful, (3) developing standards of nonviolence, (4) gaining skills to resist media portrayals of violence, and (5) feeling connected with the school and teacher.

To date, the TGFV program has been implemented in over 3,500 school districts and community agencies in all 50 states. Beginning in the Spring of 2015 and ending in the Spring of 2017, TGFV was implemented in several middle and high schools in the Cabarrus County and Kannapolis City School Districts. Students receiving the intervention were compared to students within a comparison group on a number of different metrics. This thesis is an evaluation of the TGFV intervention and focuses on the potential short-term and intermediate-term effects on several hundred minority males.

CHAPTER 2: LITERATURE REVIEW

2.1 School Violence

School violence can be defined as "youth violence that occurs on school property, on the way to or from school or school-sponsored events, or during a school-sponsored event" (Centers for Disease Control and Prevention [CDC], 2016). School violence can take many forms, including bullying, physical fights, threats, and carrying a weapon on school property (CDC, 2016). Although various methods have been employed to measure school violence, scholars have primarily relied on official reports, self-reports, and victimization surveys with the latter providing perhaps the most valid indicator of the actual amount of violence that occurs (Lawrence, 2006). A nationally representative self-report survey of youth in grades 9-12 demonstrated that over seven percent of students reported being in a physical fight on school property in the twelve months prior to the survey; over five percent reported not going to school on one or more days in the 30 days prior to the survey due to feeling unsafe at school or on their way to school; six percent reported being threatened or injured with a weapon on school property one or more times in the twelve months prior to the survey; twenty percent reported being bullied on school property (Kann et al., 2016).

While violence remains an issue in today's schools, school violence has also been decreasing for over two decades. From 1992 to 2015, the rate of violent victimization at school declined overall from 68 victimizations per 1,000 students to 21 victimizations per 1,000 students (Musu-Gillette et al., 2017). From 1995 to 2015, the percentage of students ages 12 to 18 who reported being violently victimized at school decreased from three to one percent (Musu-Gillette et al., 2017). In 2015, approximately three percent of students

reported being victimized at school. However, of that three percent, about two percent reported theft, whereas only one percent reported a violent victimization, and less than one-half of one percent reported a serious violent victimization (Musu-Gillette et al., 2015). Therefore, it appears that schools are seemingly safe places for children.

The most serious form of school violence – homicide - is rare. School-based homicides represent only one to two percent of homicides of school-age children (CDC, 2016). In 2015, there was approximately one student homicide or suicide at school for every 2.8 million students enrolled (Musu-Gillette et al., 2017). In a study of 37 states, there were 18,875 youth homicide incidents. Only 49, or less than 0.3 percent of the total, occurred at school. The majority took place in residences and parking lots or roads (Nekvasil, Cornell, & Huang, 2015). Therefore, homicides on school property are a statistically rare event, with more homicides occurring outside of the school environment.

2.2 Public Perceptions of School Violence

Despite reports of declining school crime and violence, there is still concern over student's safety. Americans rate school violence as one of the biggest problems facing their community's schools (Phi Delta Kappan (PDK), 2017). School crime and violence receive a substantial amount of media coverage. High-profile shootings, such as those that occurred at Sandy Hook Elementary School, are followed by a dramatic increase in news articles characterizing the incident, the offender(s), and the victims. The peaks and valleys in media coverage of major incidences of school violence from 1990 to 2006 closely mirror Gallup poll data on public fear of school crime over that same period (Kupchik & Bracy, 2009). Not only did the sheer quantity of these articles increase, but they also described school crime in a way that confirmed public fears. The articles framed school crime and violence

as bad or getting worse, persistently reminding the public about the potential for tragedy at schools, and suggested that schools should be blamed for failing to recognize warning signs from troubled students (Kupchik & Bracy, 2009).

2.3 National Response to School Violence

In response to the public's growing attention and worry concerning school violence, schools across the nation have begun to take it upon themselves to implement violence prevention efforts. One way this has been done is by putting more strict security measures into effect, such as metal detectors and school resource officers (SROs) (Hirschfield & Celinska, 2011). Additionally, a majority of schools have recently implemented zero tolerance policies**.** Since 1996, the percentage of schools that enacted zero tolerance polices has never fallen below 75 percent (U.S. Department of Education, 2013), with some estimates as high as 90 percent (CDC, 2006; Muschert & Peguero, 2010).

Since the 1990s, punitive policies, largely referred to as zero tolerance policies, have been widely implemented in schools across the country. These policies mandate the application of predetermined penalties, most often severe and disciplinary in nature, that are intended to be applied without taking into consideration the gravity of behavior, mitigating circumstances, or situational context (American Psychological Association [APA], 2008). The assumption driving these policies is that removing students who engage in disruptive and violent behavior will deter others from engaging in the same behaviors, therefore decreasing crime and violence and improving the school climate (APA, 2008).

The empirical evidence of zero tolerance, however, is weak. An extensive review of the literature demonstrated that in general, the data tended to contradict the assumptions

underlying this approach (APA, 2008). Evidence does not support the notion that these policies decrease crime, but rather they only serve to increase the amount of suspensions and expulsions (APA, 2008). In fact, these policies have been said to be the catalyst for the school-to-prison pipeline (Teasley, 2014), which is the process by which school treatment of misbehavior places children at increased risk of involvement in the criminal justice system (Kupchik & Alleyne, 2017). When students are removed from school, they are less likely to benefit from the school's ability to suppress delinquency and are allowed more unsupervised time (Kupchik & Alleyne, YEAR). Research has also demonstrated that zero tolerance policies are often enacted against first-time offenders for nonviolent, minor behaviors, such as defiance of authority (Mallett, 2016). It has been suggested that suspensions for minor behaviors might cause increases in misbehavior by alienating students and disrupting their bonds to the school (Kupchik & Alleyne, 2017). These efforts at crime reduction have been described as "Band Aid" interventions, which are delivered quickly without necessary training and investment in financial resources, but do not result in success and will at best maintain the status quo (Walker & Shinn, 2002).

2.4 School-Based Violence Prevention Programs

Although zero tolerance approaches have not demonstrated significant success in reducing school violence, other strategies have been implemented to combat the issue of preventing and reducing school violence. One strategy includes school-based prevention programs. Schools are particularly appropriate settings for prevention programs for many reasons. First, they are a primary institution for the social development of children, and provide a natural opportunity to teach and promote nonviolent conflict resolution and other social skills (Farrell et al., 2001). In addition, schools are one of the only places with almost

universal access to children. Schools provide an efficient resolution to issues of identifying a location, providing transportation, and ensuring program attendance (Farrell et al., 2001).

The overarching goal of most violence prevention programs is to reduce known risk factors associated with violence, and enhance protective factors that moderate or buffer the risks (Walker & Shinn, 2002). Known risk factors include: favorable attitudes toward problem behaviors, friends who engage in problem behaviors, and early initiation of a problem behavior (Resnick, Ireland, & Borowsky, 2004; Department of Health and Human Services[DHHS], 2001; Lipsey & Derzon, 1998). Known protective factors include such things as: developing social emotional learning skills, bonding with the school and/or teacher, and adopting conventional norms about aggression (Lösel & Farrington, 2012; Resnick, Ireland, & Borowsky, 2004; DHHS, 2001).

Walker & Shinn (2002) propose that three types of students can be identified within any school setting. These student types are: (a) typically developing, non-at-risk students, (b) students with an elevated risk status for developing behavior problems, and (c) students who show signs of life-course persistent antisocial behavior and current involvement in delinquency. These three students can be ordered along a severity of risk continuum that are associated with differing levels of intervention that represent correspondingly greater specificity, complexity, comprehensiveness, expense, and intensity. The three levels of intervention are primary, secondary, and tertiary.

Primary prevention programs, also called universal programs, target all students on a school-wide basis. The focus of these programs is to enhance protective factors in order to prohibit minor problems from developing into more serious issues. Therefore, these programs are designed to keep problems from emerging. The interventions are applied to

all students in the same way at the same dosage level. Outcome indicators focus on reduction of risk behaviors, such as substance abuse. Examples of primary prevention programs include such things as violence prevention skills training, effective academic instruction, and school-wide behavior expectations (APA, 2007; Walker & Shinn, 2002).

Secondary prevention programs, also called selective programs, target students identified as having an increased risk for violence. Interventions of these kind are designed to reverse or prevent harm from risk factors. Examples include providing behavioral or academic support, mentoring, skill development, and assistance to high-risk students. These interventions are typically applied individually or on a small-group basis (APA, 2007; Walker & Shinn, 2002).

Tertiary prevention programs, also referred to as indicated programs, target students who have already engaged in violent behavior. Whereas primary and secondary strategies aim to prevent violent conduct from occurring, tertiary strategies aim to reduce the associated harm from risk factors, namely to reduce violence. Such programs are appropriate for students who already identified as having chronic problems and who have displayed a life-course persistent pattern of antisocial and violent behavior (APA, 2007; Walker & Shinn, 2002).

It has been argued that these levels of prevention should be implemented in schools comprehensively in order to be effective (APA 2008; Walker & Shinn, 2002). Incorporating all three levels of prevention should be achieved through coordination strategies that meaningfully involve at-risk students, parents, caregivers, teachers, and peers. In an integrated approach, students who do not respond to primary prevention efforts are referred to the more intensive strategies at the secondary level. Students who do not

respond at the secondary level are then candidates for participation in tertiary programs. This cohesive method is predicted to prevent behavioral problems of roughly 75 to 85 percent of a school's students through primary prevention. Ten to fifteen percent of the remaining students are expected to respond to secondary preventions, and a very small number of students, approximately three to five percent, who do not respond to secondary prevention would then move to tertiary programs.

While it is suggested that schools implement a comprehensive, fully integrated approach to violence prevention, this is rarely applied. School resources are often strained, with tight budgets and limited funding. Consequently, schools that implement such programs typically only offer one level of prevention. Universal programs are a popular choice among schools due to their cost effectiveness and use of minimal resources. There is also strong evidence that such programs are effective at decreasing rates of violence (Hahn et al., 2007; Wilson & Lipsey, 2007). In a meta-analysis of school-based prevention programs Wilson and Lipsey (2007) found that overall, the prevention programs that have been studied, including universal, secondary, and tertiary, generally have positive effects on preventing or reducing aggression and violence. The mean effect size on aggressive and disruptive behavior outcomes for universal programs was 0.21, and the mean effect size for selected/indicated programs was 0.29. The researchers also concluded that the different levels of prevention could be chosen with relative confidence that whichever one is implemented will have positive effects. However, it was found that the most common and effective approaches were universal programs and targeted programs.

Though many schools may implement universal programs due to their cost and their general effectiveness in preventing violence, others argue that tertiary programs, typically

as effective in reducing and preventing violence, should be implemented. The argument is that the majority of resources should be focused on youth that require it the most; those already engaged in antisocial and violent behavior. Vaughn et al. (2014) have identified a severe five percent of adolescents that disproportionately commit the most violence, substance abuse, and property damage. The authors argue that resources should be devoted to this five percent since they contribute the most problem behaviors. Such resources would include tertiary interventions. While there is no research on the presence of the severe five percent within schools, it can be assumed that tertiary strategies, aimed at reducing violence among those already engaged in delinquency and presenting evidence of life-course persistent antisocial behaviors, would target the five percent of adolescents engaged in delinquency outside of school as well.

In a review of prevention programs, Nation et al. (2003) identified nine characteristics associated with effective prevention programs. One of these characteristics is outcome evaluation. Evaluation of programs is necessary to determine program effectiveness. In evaluations, there are multiple outcomes that can be measured to determine effectiveness. The most relevant for school-based violence prevention programs is aggressive and violent behavior. However, there are also other important outcome measures that can be examined. One of these is knowledge of violence. Many evaluations of prevention programs incorporate knowledge of violence as a measure indirectly related to violence. A study assessing student knowledge of violence concluded that there is room for improvement in youths' knowledge about violence and that interventions that seek to improve this are appropriate (Hausman, Spivak, & Prothrow-Stith, 1994).

Attitudes toward violence are another outcome measure that is often a part of many prevention programs. Research has demonstrated that attitudes have an important influence on behavior, particularly violent behavior (Kraus, 1995). Antisocial beliefs and attitudes have been found to be a risk factor in adolescence for youth violence (Department of Health and Human Services, 2001; Hawkins et al., 2000). Additionally, attitudes favorable toward violence have been associated with bullying and aggressive behavior among adolescents (Cotten et al., 1994; Slaby & Guerra, 1988; Perry, Perry, & Rasmussen, 1986). Vernberg, Jacobs, and Hershberger (1999) found that attitudes toward violence were related to self-reported aggression toward peers. One study found that having a negative attitude towards delinquent behavior at age 12 was a protective factor against violent behavior during later adolescence (Pardini, Loeber, Farrington, & Stouthamer-Loeber, 2012). Spaccarelli, Coatsworth, and Bowden (1995) also found that beliefs and attitudes toward violence mediated the relationship between exposure to violence and violent behavior for adolescent males already engaged in delinquent behavior. Therefore the premise behind prevention programs aimed at changing attitudes, is that changing attitudes should contribute to a change in behavior. In a meta-analysis of studies assessing the relationship between attitudes and behavior, Kim and Hunter (1993b) found a strong overall relationship (r=.79). Hawkins et al. (2000) noted that prevention programs aimed at helping youth develop positive beliefs and standards may reduce the risk for violence.

Although measuring violent and aggressive behavior is ideal, it is not always practical. Therefore, many studies measure intentions to engage in a behavior to be used as a proxy for behavior. Using intentions (I) as proxies for behavior (B) is grounded in the theory of reasoned action (Ajzen & Fishbien, 1980; Fishbein & Ajzen, 1975) and/or the

theory of planned behavior (Ajzen, 1991). Both theories suggest that an individuals' attitudes and subjective norms regarding a behavior inform his or her behavioral intention. These intentions are thought to be the immediate antecedents to behavior. Therefore, these theories propose that the most effective way to predict future behavior is to simply ask individuals their intention of engaging in that act.

Studies testing the IB relationship have reported a positive and significant correlation between intentions and behaviors (Armitage & Conner, 2001; Hartwick & Warshaw, 1988; Kim & Hunter, 1993a; Randall & Wolff, 1994; Sheppard, Hartwick, & Warshaw, 1988). However, the majority of studies are based on participants' intentions to engage in *conventional* activities, such as voting, donating blood, and going to church. Participants have little reason to conceal intentions to engage in conventional behaviors, however, measuring their intentions to engage in deviant behaviors may encourage them to underreport or overreport (Exum & Bouffard, 2010).

While not as numerous, there have been studies assessing the IB relationship using deviant activities. Exum & Layana (2018) found a very weak and not statistically significant relationship between hypothetical intentions of cheating and cheating behavior. In addition, intentions were only able to accurately predict cheating behavior in just 49% of the cases. Thus, intentions to cheat were no better than a coin-flip in predicting behavior. In a study on music piracy, Exum, Turner, and Hartman (2012) found that one-third of the sample reported some degree of piracy intentions, and approximately 7% reported strong intentions. However, no one in the study actually engaged in the behavior. The authors concluded that self-report intention to offend (SRIO) scores are better at predicting abstention from crime than actual crime participation.

Yet another area that has received attention in relation to school violence is the school climate. A school's climate can be thought of as "a complex matrix of student and adult attitudes, beliefs, and feelings about the school; interpersonal relationships within the school, values and norms, particularly in relation to resolving interpersonal conflict; and codes of behavior" (Greene, 2005 p. 243). Cohen et al. (2009) highlighted four dimensions of school climate: safety, relationships, teaching and learning, and institutional environment. The evidence regarding the relationship between school climate and violence has received mixed results. DeRosier and Newcity (2005) found that school climate was significantly related to safety, specifically interpersonal and environmental safety. However, Astor et al. (2002) found that students' perceived seriousness of the violence problem in their school was only weakly related to their assessment of school climate. In their meta-analysis, Steffgen, Recchia, and Viechtbauer (2013) found a moderate negative relationship between school climate and violence. Gottfredson et al. (2005) found that school climate explained more of student delinquency variance than externally determined factors. Reaves et al. (2018) found a small but significant relation between school climate and problem behavior over time. Therefore, while the relationship may not be strong, evidence exists that illustrates the importance of considering the impact of the school climate.

In addition to level of intervention, prevention programs also differ in program delivery. The protective and risk factors that are chosen by the programs vary depending on the individual program. However, one type of prevention program that is gaining popularity is social and emotional learning (SEL). Social and emotional learning is defined as "the capacity to recognize and manage emotions, solve problems effectively, and

establish positive relationships with others" (Zins & Elias, 2007 p. 234). SEL aids students in developing the tools necessary to successfully manage emotions, care for others, and make responsible decisions. In addition, SEL helps students establish positive relationships with others and adequately handle challenging situations (Zins & Elias, 2007). Evidence suggests that social and emotional learning programs are effective at reducing violence among students (Espelage et al., 2013; Zins & Elias, 2007). In one program, 42 percent of students at intervention schools receiving the SEL program were less likely to self-report engaging in physical aggression than students in the control schools (Espelage et al., 2013). One such SEL program that has been implemented as a universal as well as a tertiary program is the *Too Good For Violence* (TGFV) program.

2.5 Too Good for Violence Program Description

Too Good for Violence (TGFV), developed by The Mendez Foundation, is a school and community-based violence prevention and character education program designed for students in kindergarten through twelfth grades. The program is intended to enhance prosocial behaviors and skills as well as build protective factors specific to conflict and violence (Mendez Foundation, 2018). TGFV is a social emotional competency program, aimed at teaching positive attitudes, beliefs, and behaviors. It promotes a "CAREing" approach to violence prevention by teaching Conflict resolution, Anger management, Respect for self and others, and Effective communication. TGFV builds skills consecutively, therefore at each grade level, developmentally appropriate curricula are provided to address the most significant risk and protective factors (Mendez Foundation, 2018).

This program uses interactive teaching methods to encourage students to bond with prosocial peers and utilize role-playing, cooperative learning, games, small group-activities, and class discussion during the lessons (Mendez Foundation, 2018). These teaching strategies have been found to be effective in similar prevention programs (Person, Moiduddin, Hgue-Angus, & Malone, 2009). TGFV is a universal program, designed to address the aggression and violence that often begins in early childhood and increases in frequency and seriousness as children age. This program also encourages involvement from student's parents through home workouts. Information and exercises are given for parents and kids to increase parent-child communication and reinforce violence prevention skills (Mendez Foundation, 2018).

As applied in schools, TGFV consists of seven 30 to 60 minute lessons per grade for grades K-5, nine 30 to 45 minute lessons per grade in grades 6-8, and fourteen 60 minute lessons in grades 9-12. As designed, a trained teacher, counselor, or prevention specialist delivers the program in a classroom setting. The optimal dosage is once per week for 7 weeks in grades K-5; for 9 weeks in grades 6-8; and over 14 weeks for the high school core curriculum. For maximum effectiveness, the program should involve students, their families, and the entire school, using all of the program's components (Mendez Foundation, 2018).

2.6 Theoretical Basis

The theoretical foundation of TGFV includes elements of Social Learning Theory and the Social Development Model. According to Social Learning Theory, proposed by Albert Bandura, violence is a socially learned behavior that is shaped primarily through modeling of observed behaviors and reinforcement, or experiencing positive consequences

for a behavior (Bandura, 1973). This theory is based on a self-efficacy paradigm in which behaviors depend on the expected outcomes of engaging in that action, as well a sense of self-efficacy, or expectations about one's ability to engage in the behavior (Bandura, 1973). TGFV utilizes this theory in many ways such as addressing social influences and correcting misperceptions of social norms; persuading students of the value in engaging in pro-social behaviors; emphasizing the development of social and personal skills to resist pressures to engage in violence; and modeling pro-social skills, offering opportunities to perform the skills, and providing rewards and recognition for using them (Mendez Foundation, 2018).

The Social Development Model, proposed by Catalano and Hawkins (1996), is an integration of Social Control Theory and Social Learning Theory. This model emphasizes the importance of protective factors including: (a) bonding to pro-social family, school, peers, and community, and (b) clear standards of behavior. According to this model, positive socialization occurs when youth have the opportunity to engage in conventional activities, when they develop the skills necessary to become successfully involved, and when those with whom they interact consistently reward positive behaviors. Those conditions would increase attachment to others, commitment to conforming behavior, and belief in the conventional order (Catalano & Hawkins, 1996). TGFV uses this framework in that they build protective factors, including bonding and norms. This program teaches skills and provides opportunities and recognizes and rewards participation in pro-social behaviors. This model asserts that children are affected by risk and protective factors in multiple domains: individual/peer, family, and school and community (Turner et al., 2007). TGFV primarily addresses risk and protective factors in the individual/peer domain, which are best addressed in a classroom setting (Mendez Foundation, 2018).

2.7 Effectiveness

One evaluation of the program met the evidence standards of What Works Clearinghouse (WWC) (U.S. Department of Education, 2006). This study included almost 1,000 elementary students from 10 schools in a large school district in Florida (Hall & Bacon, 2005). The WWC reviewed outcomes in three domains: behavior; knowledge, attitudes, and values; and academic achievement. Hall and Bacon (2005) found that compared to students in a control group, students in the treatment group exhibited significantly more positive behavior at the 20-week post-program follow-up. Among treatment group participants, there was also a substantively important, but not statistically significant, positive effect on knowledge, attitudes, and values. The WWC rates interventions as being either positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. After their analysis, WWC rated TGFV as having potentially positive effects on behavior and on knowledge, attitudes, and values (U.S. Department of Education, 2006).

The National Registry of Evidence-based Programs and Practices (NREPP) also reviewed the effectiveness of TGFV based on three outcome measures: self-concept, social competence, and disruptive behavior disorders and symptoms. After a review of three studies, NREPP concluded that the program is effective at improving self-concept and social competence, and is promising for reducing disruptive behaviors and disorders (SAMHSA, 2017). Hall and Bacon (2007) did not find a statistically significant difference between the intervention and control groups in inappropriate behaviors at the immediate post-test. Burnes (2007) found that from four weeks before to four weeks after the intervention, the number of office referrals decreased among the intervention group, but

increased among the control group. Unfortunately, no assessment of statistical significance of the intervention effect occurred (Burnes, 2007). It was also concluded that the program was equally effective regardless of students' ethnic backgrounds, gender, or socioeconomic status.

The effectiveness of TGFV implemented in high schools has also been evaluated. One study of 201 students at a large Florida high school demonstrated that after program delivery, students in the intervention group indicated 45 percent fewer intentions to engage in aggressive behaviors than did students in the control group (Bacon, 2001). These students also had significantly higher scores or more appropriate attitudes regarding aggressive or violent behaviors compared to those in the control group, were more knowledgeable of actual rates of substance and violence use among youth in their age group, thought their peer group was less accepting of substance and violence use, demonstrated higher levels of emotional competency and self-efficacy, had more positive perceptions of their goal setting and decision making skills, and had more positive perceptions of their social and peer resistance skills. The improved skills are argued to be indicators of growth protective factors (Bacon, 2001).

The Substance Abuse and Mental Health Services Administration (SAMHSA) has listed TGFV as a model program, the Promising Practices Network screened this program and concluded it was a program that works, and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) rated the program as promising in April of 2012 (OJJDP, 2012).

While studies have demonstrated the potential positive effects of TGFV, there are several limitations to these studies. First, the primary evaluations of these studies were all

conducted in Florida, therefore the generalizability to schools in other locations may be limited. Second, while there has been one evaluation of the program implemented in high school, most of the studies have focused on youths in elementary school. This is a limitation because serious levels of violence are typically not observed until middle and high school. Third, the outcome measured is often the intent to engage in violence. While this is helpful in regards to measuring attitudes and beliefs toward violence, their behavior may actually be different. Finally, several of the studies did not conduct long-term follow ups on the intervention and control students. The program may be effective in the short-term, but not as effective in the long-term.

As demonstrated, TGFV has promising effects on preventing and reducing violence in school. Research has demonstrated that school-based programs are effective. However, evaluations are necessary in order to be sure that resources are being put into programs and prevention efforts that actually work. While there have been evaluations on this program, the literature is still limited. Therefore, this thesis attempts to add to the literature regarding the effectiveness of a school-based violence prevention program.

2.8 Current Study

The current study is an evaluation of the TGFV program implemented in middle schools and high schools in Cabarrus County, North Carolina. Youth in North Carolina, in general and the targeted schools in particular, were identified because these adolescents are more likely to experience violence when compared to the national average. Data indicate that 6.8% of North Carolina youth reported not attending school on at least one day because they felt unsafe, compared to only 5.9% nationwide (Eaton et al., 2012). Data also indicate that 9.1% of North Carolina youth reported that they had been threatened or injured with a

weapon on school property in the past year, whereas only 7.4% of youth in the nation did so. Minority male youth are significantly more likely than other demographic sub-groups to experience violence (Tatum, 2017). In fact, 15.6% of Hispanic males in North Carolina and 13.7% African American males had been threatened or injured by a weapon on school property. Only 9% of White students reported this experience (Eaton et al., 2012). Therefore, there is a need for prevention efforts in North Carolina.

Cabarrus Students Taking a Right Stand (*STARS*) is a male youth leadership program, which implemented the TGFV curriculum, and is aimed at creating a healthy and positive school community and seeks to reduce violence and violent victimization. The hypotheses for this thesis are as follows:

H_1: TGFV will increase student knowledge about violence. A logic model of the TGFV program documents the proximate or short-term goal of increasing knowledge about violence and its contributing factors (i.e., alcohol and drugs).

H_2: TGFV will result in student attitudes less favorable toward violence. This hypothesis was derived from the Mendez Foundation's claim that an intermediate outcome of the program is unfavorable attitudes toward violence. The instrument used to assess attitudinal measures is subdivided into several domains that permit a deeper understanding of the potential changes occurring in attitudes toward violence.

H_3: TGFV will reduce intentions to engage in violence among high school students.

H_4: TGFV will improve school safety and climate. This hypothesis is derived from the Mendez Foundations claim that the TGFV program will result in a school climate that is safer and less favorable to violence.

CHAPTER 3: METHODS

3.1 Sample

Data on students in the treatment and control groups were collected over a three-year period from students enrolled in five schools in Cabarrus County, North Carolina. The schools included AL Brown High School, Kannapolis Middle School (KMS), Concord Middle School (CMS), Concord High School (CHS), and the Cabarrus County Opportunity School (CCOS). These schools were selected as intervention sites because they serve students who are at the greatest risk of violent involvement due to low socioeconomic status, high rates of single parent households, high rates of free and reduced lunch, and large levels of disciplinary referrals related to violence and aggression. In all the schools, at least half of the student body received free or reduced lunches and the racial/ethnic demographics were predominantly ethnic minorities.

Each semester, 25 to 40 male students from each of the schools were selected to participate in the TGFV program. Students were not placed into the treatment and control groups via random assignment; instead, school staff selected students to be placed in either group. Students in the treatment group were identified by school staff as having a high likelihood of being violent, such as exhibiting violence in school, associating with violent peers, and experiencing violence at home. Per the stipulations required in the Federal grant supporting this research effort, all were minority males.[1] School staff then selected students who were similar to the treatment group in terms of their proclivity to be violent and were also all minority males. This group of students formed the control group. Comparisons

[1] Turner, Michael G. [PI]. (Department of Health and Human Services and the Department of Justice). *Minority Youth Violence Prevention: Integrating Public Health and Community Policing Approaches*. Funded at $90,000.00 (Total project budget request: $988,762.00).

across treatment and control groups on measures documenting knowledge and attitudes toward violence were conducted prior to the intervention to identify group equivalency (the elements that comprised the knowledge of violence and attitudes toward violence measures are discussed below).

As previously mentioned, the sample consisted of all males. Additionally, as depicted in Table 3.1, all students were of minority status, primarily African-American, and the majority of students were enrolled at the middle school level.

Table 3.1 Demographic Characteristics of Treatment and Control Groups

	Treatment		Control	
Characteristic	**n**	**%**	**n**	**%**
Age				
13-15	206	68.2	162	61.1
16-18	96	31.8	103	38.9
Race				
African-American	212	70.2	184	69.4
Hispanic	90	29.8	81	30.6

3.2 Measures

The independent variable in the current study is program participation. The percentage of days that each student participated in the intervention was calculated. For middle school students, the attendance range was 6% to 100%, with a mean of 72.7%. High school students had a range of 17% to 100%, with a mean of 77.4%. The program lasted approximately twelve weeks, with the intervention being administered once a week for ninety minutes.

There are various outcome measures, or dependent variables, in this evaluation. These measures include knowledge about violence, attitudes toward violence, intentions to engage in violence, and school climate. To measure participants' knowledge about violence, treatment and comparison group participants were given a twenty-item instrument prior to and subsequently following the intervention. This instrument was administered in person and the response rate averaged 98% across schools. The items in this measure requested respondents to choose from 4 options and inquired about their knowledge on bullying, physical signs of potential violence, potential responses to violent situations, etc. Each item only had one correct answer. Students' scores on the knowledge of violence instrument could potentially range from 0 to 20. Higher scores indicate a greater knowledge of the subject matter. The knowledge of violence instrument can be found in Appendix A (middle school) and B (high school).

The attitudes toward violence instrument ranged between 54 items (middle school) and 36 items (high school). To measure participants' attitudes toward violence, treatment and control group participants completed this instrument prior to and subsequently following the intervention. The items in the middle school attitudes toward violence measure fell into the following 9 areas: (1) Goal Setting, (2) Emotions, (3) Communication, (4) Peer Resistance, (5) Respect, (6) Conflict Resolution, (7) Anger Management, (8) Bully Awareness, and (9) Violence Awareness. The items in the high school attitudes toward violence measure fell into the following 9 areas: (1) Goal Setting, (2) Decision Making, (3) Media and Social Influences, (4) Communication, (5) Conflict Resolution, (6) Social Competence, (7) Peer Resistance, (8) Harmful Effects, and (9) Drug and Alcohol Use Intentions (high school only). Response options for the middle school attitudes toward

violence instrument were: 1 = “strongly agree”, 2 = “agree”, 3 = “not sure”, 4 = “disagree”, and 5 = “strongly disagree”. Response options for the high school attitudes toward violence instrument were: 1 = “agree a lot”, 2 = “agree a little”, 3 = “not sure”, 4 = “disagree a little”, and 5 = “disagree a lot”. Student scores on the attitudes toward violence instrument could potentially range from 1.0 to 5.0. Higher scores indicate more positive attitudes, perceptions, and skills. The attitudes towards violence surveys can be found in Appendix C (middle school) and E (high school), and the accompanying subscales in Appendix D (middle school) and F (high school).

Student intentions to use drugs and alcohol is a subscale of the high school version of the student attitudes towards violence instrument. Question number 36 on this measure states, “I have decided I won’t get into any fights where someone could be physically hurt during the next year.” Scores range from 1 to 5, where scores of 1,2, and 3 indicate higher intentions to engage in violent behavior, and scores of 4 or 5 indicate less intentions to engage in that behavior.

The New Jersey School Climate Survey - Student Version (NJSCS-Student) was given to students in the treatment and comparison schools to measure potential school-level changes in the school environment. The NJSCS-Student is a 58-item instrument in which students were asked to rate their level of agreement to statements that measured 7 areas: (1) physical environment, (2) teaching and learning, (3) morale in the school community, (4) student relationships, (5) parental support, (6) safety, and (7) emotional environment. Response options for each question were: 1 = “strongly disagree”, 2 = “disagree”, 3 = “neutral”, 4 = “agree”, and 5 = “strongly agree”. This survey was administered online via Surveyshare to a random sample of 10% of the school population.

The response rate ranged from 42% to 48% across schools. The school climate instrument can be found in Appendix G.

3.3 Analytic Strategy

All statistical analyses will be performed using SPSS version 23. Difference-of-means tests will be used to test for significant differences in pre- and- post scores of student knowledge for both treatment and control students. Difference-of-means tests will also be used to test for significant differences across pre-and-post student attitudinal data for both treatment and control groups. Difference-of-means tests will be used to test for significant differences in climate scores for both treatment and control schools.

CHAPTER 4: RESULTS

The pre-test Student Knowledge data for the treatment and control groups are presented in Table 4.1. Students are scored based on the number of correct answers they report (possible range from 0 to 20). Higher scores indicate a greater knowledge of the subject matter. The data in Table 4.1 indicate that middle school students in the comparison group scored slightly higher (mean = 8.47) than middle school students in the treatment group (mean = 7.76). These differences, however, were not significant at conventional levels. Similarly, the data in Table 4.1 indicate that high school students in the comparison group scored slightly higher (mean = 7.46) than high school students in the treatment group (mean = 6.68). These differences, however, were significant at conventional levels suggesting that compared to those in the treatment group, high school students in the comparison group had significantly more knowledge about violence and its contributing causes at the pre-test period.

Table 4.1 Middle and High School Student Knowledge Data – Pretest Measures

	N	Mean	SD	t-value	Sig.
STUDENT KNOWLEDGE TEST					
Middle School Comparison Group	140	8.47	4.77	1.47	.142
Middle School Treatment Group	206	7.76	4.20		
STUDENT KNOWLEDGE TEST					
High School Comparison Group	94	7.46	2.42	2.08	.039
High School Treatment Group	85	6.68	2.62		

The pre-test Student Attitudes data for the treatment and control groups are presented in Table 4.2. A total of 344 middle school students (136 comparison and 208 treatment) completed the Student Attitudes instrument before the TGFV began. The data

in Table 4.2 indicate that students in the treatment group scored significantly higher compared to students in the comparison group on all but three of the attitudinal dimensions measured. The peer resistance, conflict resolution, and anger management dimensions were the non-significant dimensions. These findings suggest that the middle students identified to receive the TGFV intervention held significantly different attitudes at the pre-test stage on many of the attitudinal dimensions than their counterparts identified to be included in the comparison group.

Table 4.2 Middle School Attitudinal Data – Pretest Measures

	N	Mean	SD	t-value	Sig.
GOAL SETTING					
Middle School Comparison Group	136	3.56	0.90	-4.59	.000
Middle School Treatment Group	208	3.94	0.65		
EMOTIONS					
Middle School Comparison Group	136	3.36	0.84	-2.01	.046
Middle School Treatment Group	208	3.54	0.81		
COMMUNICATION					
Middle School Comparison Group	136	3.43	0.88	-3.92	.000
Middle School Treatment Group	208	3.77	0.71		
PEER RESISTANCE					
Middle School Comparison Group	136	3.65	1.01	-1.89	.058
Middle School Treatment Group	208	3.84	0.77		
RESPECT					
Middle School Comparison Group	136	3.71	1.10	-4.51	.000
Middle School Treatment Group	208	4.16	0.75		
CONFLICT RESOLUTION					
Middle School Comparison Group	136	3.46	0.90	-1.17	.241
Middle School Treatment Group	208	3.57	0.86		
ANGER MANAGEMENT					
Middle School Comparison Group	136	3.44	0.82	-1.85	.065
Middle School Treatment Group	208	3.61	0.84		
BULLY AWARENESS					
Middle School Comparison Group	136	3.64	0.92	-2.18	.029

Table 4.2 Middle School Attitudinal Data – Pretest Measures

	N	Mean	SD	t-value	Sig.
Middle School Treatment Group	208	3.84	0.78		
VIOLENCE AWARENESS					
Middle School Comparison Group	136	3.76	1.04	-2.02	.044
Middle School Treatment Group	208	3.96	0.77		

The pre-test Student Attitudinal data for high school students are presented in Table 4.3. A total of 165 high school students (81 comparison and 84 treatment) completed the Student Attitudes instrument. There were no significant differences between high school students in the comparison and treatment groups on any of the attitudinal dimensions. Compared to the middle school students, the high school students in the two groups appear to be more similar in their attitudes at the pre-test stage.

Table 4.3 High School Attitudinal Data – Pretest Measures

	N	Mean	SD	t-value	Sig.
GOAL SETTING					
High School Comparison Group	81	3.94	0.90	-1.19	.233
High School Treatment Group	84	4.09	0.61		
DECISION MAKING					
High School Comparison Group	81	3.60	0.84	-1.15	.249
High School Treatment Group	84	3.73	0.62		
MEDIA AND SOCIAL INFLUENCES					
High School Comparison Group	81	3.46	0.87	0.62	.534
High School Treatment Group	84	3.38	0.81		
COMMUNICATION					
High School Comparison Group	81	3.67	0.68	-0.45	.648
High School Treatment Group	84	3.72	0.54		
CONFLICT RESOLUTION					
High School Comparison Group	81	3.54	0.73	0.73	.462
High School Treatment Group	84	3.46	0.64		

Table 4.3 High School Attitudinal Data – Pretest Measures

	N	Mean	SD	t-value	Sig.
SOCIAL COMPETENCE					
High School Comparison Group	81	3.80	0.87	0.16	.866
High School Treatment Group	84	3.78	0.61		
PEER RESISTANCE					
High School Comparison Group	81	3.86	0.86	1.43	.153
High School Treatment Group	84	3.79	0.65		
HARMFUL EFFECTS					
High School Comparison Group	81	3.75	0.98	0.17	.861
High School Treatment Group	84	3.72	0.75		
DRUG & ALCOHOL USE INTENTIONS					
High School Comparison Group	81	3.73	0.96	-1.10	.271
High School Treatment Group	84	3.88	0.80		

The pre-and posttest Student Knowledge data are presented in Table 4.4. Beginning with the middle school students, individuals in the comparison group increased their average score by 0.3 points (8.35 points at the pretest to 8.65 points at the posttest). This increase in student knowledge among the comparison students did not reach conventional levels of significance (p=.257). Individuals in the treatment group increased their average score by 0.6 points (7.46 points at the pretest to 8.06 points at the posttest). This increase in student scores within the treatment group did reach conventional levels of significance (p=.011). Combined, these data suggest that while middle school students' knowledge in the control groups remained about the same, middle school students' knowledge in the treatment group significantly increased. This finding suggests that the intervention appears to have some effect in increasing students' knowledge about violence.

Turning to high school students, individuals in the comparison group decreased their average score by 0.44 points (7.33 points at the pretest to 6.89 points at the posttest). This decrease in student knowledge among the comparison students did not reach conventional levels of significance (p=.290). Individuals in the treatment group increased their average score by 6.32 points (6.70 points at the pretest to 13.02 points at the posttest). This increase in student scores within the treatment group did reach conventional levels of significance (p=.000). Similar to the middle school student data, these data suggest that while high school students' knowledge in the control groups remained about the same, high school students' knowledge in the treatment group significantly increased. This finding suggests that the intervention appears to have some effect in increasing students' knowledge about violence.

Table 4.4 Student Knowledge Data – Pretest and Posttest Measures

	Pretest Mean	Posttest Mean	t-value	Sig.
MIDDLE SCHOOL				
Comparison Group	8.35	8.65	-1.13	.257
Treatment Group	7.46	8.06	-2.58	.011
HIGH SCHOOL				
Comparison Group	7.33	6.89	1.07	.290
Treatment Group	6.70	13.02	-11.86	.000

Student knowledge data was also broken down by dosage level, to determine if there was a dosage effect, or in other words, to determine if students who received more of the intervention had higher scores at the posttest. Dosage was measured by attendance. The median attendance was computed, and anything falling below this number was considered

low dosage, and anything above the mean was high dosage. The student knowledge by dosage level is presented in Table 4.5. Beginning with middle school students, individuals with low dosage experienced a decrease in their average score by 0.34 points (8.13 at the pretest to 7.79 at the posttest). This decrease in student knowledge did not reach conventional levels of significance (p=.285). Individuals with high dosage increased their average score by 1.8 points (6.75 at the pretest to 8.55 at the posttest). This increase in student scores did reach conventional levels of significance (p=.000). These data suggest that for middle school students, there is a dosage effect, in which students who received more of the intervention, or who had higher attendance, had higher knowledge than those with lower involvement in the intervention.

Turning to high school students, individuals with low dosage increased their average score by 3.72 points (7.00 points at the pretest to 10.72 points at the posttest). This increase in student knowledge did reach conventional levels of significance (p=.001). Individuals with high dosage increased their average score by 8.22 points (6.52 points at the pretest to 14.74 points at the posttest). This increase also reached conventional levels of significance (p=.000). Combined, these data suggest that while both groups significantly increased their knowledge, there was a dosage effect. Individuals with high dosage, or higher attendance, had a much larger increase in scores compared to those with low dosage.

Table 4.5 Student Knowledge Data by Dosage

	Mean	**S.D.**	**t-value**	**Sig.**
MIDDLE SCHOOL				
Low Dosage				
Pretest	8.13	4.28	1.08	.285
Posttest	7.79	3.98		

High Dosage				
Pretest	6.75	3.62	-6.28	.000
Posttest	8.55	4.46		
HIGH SCHOOL				
Low Dosage				
Pretest	7.00	2.25	-3.89	.001
Posttest	10.72	4.61		
High Dosage				
Pretest	6.52	2.81	-17.32	.000
Posttest	14.74	2.92		

The pre- and posttest Student Attitudinal data for middle and high school students are presented in Tables 4.6 and 4.7. Beginning with middle school students, the data in Table 4.6 indicate that on every attitudinal dimension both middle school students in the treatment and the comparison groups significantly increased their attitudes between the pre-test and the post-test measurement points. It is notable that this finding emerged even though the middle school students in the treatment group scored significantly higher at the pre-test stage than middle school students in the comparison group on every measure taken at the pre-test stage. This is important given that compared to middle school students in the comparison group, the middle school students in the treatment group had less room to change their attitudes in the positive direction. These results appear to suggest that the TGFV program may not have been the source of change in middle school student attitudes toward violence.

Table 4.6 Middle School Student Attitudinal Data – Pretest and Posttest Measures

	Pretest Mean	**Posttest Mean**	**t-value**	**Sig.**
GOAL SETTING				

Table 4.6 Middle School Student Attitudinal Data – Pretest and Posttest Measures

	Pretest Mean	Posttest Mean	t-value	Sig.
Middle School Comparison Group	3.57	3.99	-4.40	.000
Middle School Treatment Group	3.96	4.20	-4.46	.000
EMOTIONS				
Middle School Comparison Group	3.38	3.66	-2.83	.005
Middle School Treatment Group	3.54	3.96	-6.84	.000
COMMUNICATION				
Middle School Comparison Group	3.47	3.84	-3.95	.000
Middle School Treatment Group	3.77	4.11	-6.49	.000
PEER RESISTANCE				
Middle School Comparison Group	3.67	4.05	-3.54	.001
Middle School Treatment Group	3.85	4.12	-4.92	.000
RESPECT				
Middle School Comparison Group	3.71	4.19	-4.10	.000
Middle School Treatment Group	4.19	4.37	-3.34	.001
CONFLICT RESOLUTION				
Middle School Comparison Group	3.49	3.86	-3.92	.000
Middle School Treatment Group	3.57	3.97	-6.98	.000
ANGER MANAGEMENT				
Middle School Comparison Group	3.48	3.80	-3.60	.000
Middle School Treatment Group	3.61	4.00	-6.81	.000
BULLY AWARENESS				
Middle School Comparison Group	3.70	3.96	-2.71	.008
Middle School Treatment Group	3.87	4.15	-5.20	.000
VIOLENCE AWARENESS				
Middle School Comparison Group	3.80	4.11	-3.08	.003
Middle School Treatment Group	3.99	4.30	-6.07	.000

Turning to high school students, the data in Table 4.7 indicate that high school students in the comparison group significantly increased their attitudes on 3 of the 9 attitudinal dimensions while high school students in the treatment group significantly increased their attitudes on 8 of the 9 attitudinal dimensions. These results suggest that the TGFV intervention improved attitudes of high school students in the media and social influences, communication, conflict resolution, social competence, peer resistance, and harmful effects dimensions. Significant attitudinal changes on these dimensions were not observed for high school students in the comparison group.

Table 4.7 High School Student Attitudinal Data – Pretest and Posttest Measures

	Pretest Mean	**Posttest Mean**	**t-value**	**Sig.**
GOAL SETTING				
High School Comparison Group	4.02	4.27	-2.15	.036
High School Treatment Group	3.99	4.34	-3.39	.001
DECISION MAKING				
High School Comparison Group	3.70	3.93	-2.05	.044
High School Treatment Group	3.62	4.00	-3.61	.001
MEDIA AND SOCIAL INFLUENCES				
High School Comparison Group	3.56	3.76	-1.58	.119
High School Treatment Group	3.23	3.90	-6.01	.000
COMMUNICATION				
High School Comparison Group	3.76	3.81	-0.58	.558
High School Treatment Group	3.66	4.05	-4.75	.000
CONFLICT RESOLUTION				
High School Comparison Group	3.56	3.70	-1.28	.202
High School Treatment Group	3.38	3.90	-5.79	.000
SOCIAL COMPETENCE				
High School Comparison Group	3.92	4.00	-0.69	.487
High School Treatment Group	3.67	4.12	-4.70	.000

Table 4.7 High School Student Attitudinal Data – Pretest and Posttest Measures

	Pretest Mean	Posttest Mean	t-value	Sig.
PEER RESISTENCE				
High School Comparison Group	3.93	3.97	-0.28	.775
High School Treatment Group	3.63	4.17	-5.74	.000
HARMFUL EFFECTS				
High School Comparison Group	3.81	4.06	-1.73	.087
High School Treatment Group	3.61	4.08	-4.63	.000
DRUG & ALCOHOL USE INTENTIONS				
High School Comparison Group	3.80	4.11	-2.56	.013
High School Treatment Group	3.50	4.13	-2.81	.006

To further investigate the impact of the program on attitudes, attendance in the program, or dosage levels, were analyzed. Attendance was split at the median, in which attendance rates above the median was considered high dosage and attendance rates below the median was low dosage. The pre-and posttest data for middle school and high school students are presented in Tables 4.8 and 4.9.

Beginning with the middle school students, Table 4.8 shows that high dose students significantly increased their attitudes on all but one of the dimensions. Low dose students significantly increased their attitudes on all of the dimensions. Therefore, the data suggest that the program may not be solely responsible for changes in attitudes, considering the amount of exposure to the program did not impact change in attitudes. Regardless of whether students participated in the program very little or a lot, attitudes increased for both groups of students.

Table 4.8 Middle School Student Attitudinal Data by Dosage

	Pretest Mean	Posttest Mean	t-value	Sig.
GOAL SETTING				
Low Dosage	3.80	4.24	-5.25	.000
High Dosage	4.12	4.18	-0.94	.349
EMOTIONS				
Low Dosage	3.36	3.92	-5.65	.000
High Dosage	3.72	4.01	-3.95	.000
COMMUNICATION				
Low Dosage	3.61	4.07	-5.37	.000
High Dosage	3.94	4.17	-3.70	.000
PEER RESISTANCE				
Low Dosage	3.69	4.07	-4.34	.000
High Dosage	4.01	4.17	-2.41	.018
RESPECT				
Low Dosage	4.04	4.37	-3.57	.001
High Dosage	4.35	4.40	-0.85	.395
CONFLICT RESOLUTION				
Low Dosage	3.32	3.94	-7.18	.000
High Dosage	3.80	4.02	-2.79	.006
ANGER MANAGEMENT				
Low Dosage	3.39	3.92	-6.19	.000
High Dosage	3.82	4.08	-3.50	.001
BULLY AWARENESS				
Low Dosage	3.72	4.13	-4.88	.000
High Dosage	4.03	4.19	-2.32	.022
VIOLENCE AWARENESS				
Low Dosage	3.83	4.26	-5.29	.000
High Dosage	4.15	4.36	-3.53	.001

Turning to high school students, Table 4.9 demonstrates that high dose students significantly increased their mean scores on eight of the nine dimensions. Alternatively, low dose students significantly increased their mean scores on seven of the nine dimensions. Therefore, the data suggest that no dosage effect is present, and regardless of the amount of exposure to the program, attitudes increased for both groups of students. This suggests that something other than the program is responsible for the change in attitudes toward violence.

Table 4.9 High School Student Attitudinal Data by Dosage

	Pretest Mean	Posttest Mean	t-value	Sig.
GOAL SETTING				
Low Dosage	4.13	4.29	-1.20	.241
High Dosage	3.88	4.41	-3.68	.001
DECISION MAKING				
Low Dosage	3.62	3.93	-2.14	.041
High Dosage	3.63	4.03	-2.62	.012
MEDIA AND SOCIAL INFLUENCES				
Low Dosage	3.27	3.88	-3.39	.002
High Dosage	3.27	3.89	-4.36	.000
COMMUNICATION				
Low Dosage	3.62	3.96	-2.26	.032
High Dosage	3.67	4.12	-4.24	.000
CONFLICT RESOLUTION				
Low Dosage	3.46	3.86	-2.41	.023
High Dosage	3.36	3.94	-5.94	.000
SOCIAL COMPETENCE				
Low Dosage	3.61	4.07	-2.90	.007
High Dosage	3.71	4.18	-3.81	.000

Table 4.9 High School Student Attitudinal Data by Dosage

	Pretest Mean	Posttest Mean	t-value	Sig.
PEER RESISTENCE				
Low Dosage	3.71	4.17	-3.11	.004
High Dosage	5.60	4.19	-4.79	.000
HARMFUL EFFECTS				
Low Dosage	3.63	4.12	-3.67	.001
High Dosage	3.61	4.10	-3.27	.002
DRUG & ALCOHOL USE INTENTIONS				
Low Dosage	3.73	4.05	-1.97	.059
High Dosage	3.89	4.16	-1.63	.111

The pre- and posttest data for high school student intentions to engage in violence are presented in Table 4.10. This measure was one question in the drug and alcohol use intentions attitudinal dimension. As a reminder, higher scores indicate lower intentions to engage in violence. The data in Table 4.10 indicate that individuals in the comparison group increased their average score by 0.4 points (3.38 points at the pretest to 3.78 points at the posttest). This increase in score among the comparison group reached conventional levels of significance (p=.013). Individuals in the treatment group increased their average score by 0.46 points (3.43 points at the pretest to 3.89 points at the posttest). This increase in scores within the treatment group also reached conventional levels of significance (p=.006). Combined, these data suggest that the TGFV program may not have contributed to the change in high school students' intentions to engage in violence.

Table 4.10 High School Student Intentions to Engage in Violence

	Pretest Mean	Posttest Mean	t-value	Sig.
Comparison Group	3.38	3.78	-2.56	.013
Treatment Group	3.43	3.89	-2.85	.006

The student climate data for treatment and control schools are presented in Tables 4.11 and 4.12 below. The data for each individual school are included in Appendices I through N. Beginning with the control schools, the data in Table 4.11 demonstrates that five of the seven dimensions experienced a significant decrease. The relationships dimension experienced an increase, and this change was significant. The safety dimension also experienced an increase, however, this change was not significant.

Turning to the treatment schools, the data in Table 4.12 demonstrates that five of the seven dimensions experienced a significant increase in mean score. The teaching dimension experienced growth, although it was not significant. The support dimension experienced a significant decrease in its mean score. These data suggest that compared to students in control schools, the students in treatment schools experienced growth on a greater number of dimensions of school climate.

Table 4.11 Control Schools Student Climate Data

Dimension	Mean	S.D.	T	Sig.
Physical				
2015	12.72	2.46	3.61	.000
2017	11.83	3.05		
Teaching				
2015	37.80	7.74	6.30	.000
2017	34.03	6.30		

Morale				
2015	32.41	3.89	2.27	.024
2017	31.58	4.36		
Relationships				
2015	11.62	2.79	-2.75	.006
2017	12.38	2.44		
Support				
2015	13.36	2.15	9.54	.000
2017	11.47	2.35		
Safety				
2015	12.22	2.33	-1.223	.222
2017	12.51	2.93		
Emotional				
2015	42.79	6.46	2.18	.030
2017	41.50	6.97		
Total				
2015	162.92	18.06	4.51	.000
2017	155.30	20.14		

Table 4.12 Treatment Schools Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.15	2.69	-2.30	.022
2017	12.53	2.50		
Teaching				
2015	34.89	7.87	-1.11	.269
2017	35.35	5.31		
Morale				
2015	31.55	4.55	-2.40	.017
2017	32.20	4.02		
Relationships				
2015	12.02	2.80	-5.41	.000
2017	13.02	2.95		
Support				

2015	12.23	2.81	6.804	.000
2017	11.18	2.10		
Safety				
2015	11.96	2.39	-6.466	.000
2017	13.01	2.63		
Emotional				
2015	40.31	6.99	-8.621	.000
2017	43.92	6.23		
Total				
2015	155.12	20.76	-4.97	.000
2017	161.22	18.09		

CHAPTER 5: DISCUSSION

The purpose of the current study was to contribute to the violence prevention literature by examining the effectiveness of the school-based, tertiary violence prevention program, known as TGFV, in Cabarrus County, North Carolina. Many resources go into violence prevention, and it is important to evaluate such programs to ensure that resources are being allocated to effective efforts. Several key factors have been associated with subsequent violence that can be used as outcome measures. These include knowledge of violence, attitudes toward violence, intentions to engage in violence, and the school climate. This study sought to determine whether TGFV was effective at increasing student knowledge of violence, decreasing attitudes favorable towards violence, decreasing intentions to engage in violence, and increasing the school climate.

Four key findings emerged from this study. First, the program was effective at increasing student knowledge of violence for both middle school and high school students. This is an important proximate goal of the intervention because change in knowledge is an important precursor to changes in behavior. The data showed that while the scores of the comparison students remained about the same, students that received the intervention significantly increased their scores. Upon further analysis, the data demonstrated that a dosage effect was present, in which students who attended the program more experienced a greater increase in scores, providing further evidence that the program is effective at increasing knowledge.

Second, the program appeared to be more effective for high school students than middle school students. The student knowledge data shows that high school students in the treatment group increased their mean score by 6.32 points. However, the middle school

students in the treatment group only increased their mean score by 0.6 points. While this change was significant, the data demonstrate that high school students had a much larger increase in knowledge.

Third, changes in attitudes or intentions cannot be attributed solely to the program. The data for middle school attitudinal dimensions showed that both the control and treatment groups significantly increased their attitudes, suggesting the program was not the sole cause of the change. The attitudinal data for high school students suggested that the TGFV program was responsible for an improvement in 8 of the 9 dimensions. However, when this was analyzed with attendance data, the data suggested that there were little differences between the scores of low dosage students and high dosage students. This suggests that the program was not effective at increasing the attitudinal dimensions. Similarly, changes in intentions to engage in violence for high school students were significant for students in both the comparison and treatment groups, suggesting the program was not the sole cause of this change.

Fourth, the TGFV program had some impact on the school climate. Treatment schools experienced significant growth in a majority of the school climate dimensions, whereas control schools experienced a significant decrease in a majority of the dimensions. Considering this is a violence prevention program, one dimension of interest is safety. The average scores of the control schools remained relatively stable for this dimension, however, the treatment schools demonstrated significant growth. This suggests that the program is effective at increasing school climate and safety.

Although this research uncovered several key findings related to the school violence prevention program *Too Good for Violence*, there are several limitations of the

study that should be acknowledged. First, there was no random assignment of participants to the control and treatment groups. Statistical analyses were conducted to demonstrate group equivalency at the pretest, however, the data suggested that on some measures the students were not equivalent. This results in reduced internal validity, making decisions about causality less conclusive. In addition, pre-existing influences are less controlled for in this quasi-experimental design.

Second, there were no behavioral measures in the present study. The program is centered around preventing and reducing violence for middle and high school students. Therefore, the best outcome measure would have been a direct behavioral measure. However, there were several difficulties with obtaining this information. Since this program is for youth, gaining information such as individual level police contact data was limited. In addition, this program was implemented in schools in two separate school districts, therefore the information each was willing to provide differed, making information difficult to obtain. Since this study does not have a behavioral measure, other key factors associated with behavior, such as knowledge, attitudes, intentions, and school climate were used, with the assumption that changing these factors would subsequently change behavior. However, this assumption could not be tested, so the extent to which this occurred is unknown.

Finally, there was no measure of the fidelity of the intervention. Research has demonstrated the importance of verifying that interventions were administered as designed (Horner, Rew, & Torres, 2006). If the program was not administered correctly, it could result in non-significant findings that are not due to the study itself but rather to elements that affected intervention delivery. In the case of the present study, a measure of fidelity

would have been important given the finding that the intervention was not effective at changing attitudes toward violence and intentions to engage in violence. This measure could have supported the notion that it was the program itself that was ineffective, not problems with the way it was administered.

In light of these limitations, it is important that future research continue to improve the evaluation of school-based violence prevention programs. One recommendation is to use a variety of direct behavioral measures in order to determine program effectiveness in reducing violence across multiple domains. While many prevention efforts are school-based, they are educational programs that are aimed at changing core attitudes and beliefs, therefore change should not just be limited to the school context. Therefore, behavioral measures could include measures of bullying, class disruptiveness, suspensions and expulsions for violent offenses, victimization, dating violence, and police contacts outside of school.

A second recommendation is to further examine the association between age of student and program effectiveness. This study found that the program was more effective for high school students than middle school students. A fidelity measure would first be able to determine if the program was implemented the same for both students. If so, then further research could be conducted on differences in effectiveness across ages.

A third recommendation is to gather long-term follow up data in order to gain further insight into the effectiveness of the program. Many evaluation studies only gather posttest data at one collection point. However, this is not telling of the long-term impact of the study. If significant findings are present, this could simply be a quick fix in which

knowledge and attitudes return to levels similar to that at the pretest after some time has passed or it could have a more meaningful effect.

This program has further policy implications than just attempting to reduce violence within schools. Every program and policy has intended and unintended consequences. For example, for zero tolerance policies the unintended consequences were an increase in expulsions and suspensions and acting as a catalyst for growth in the school-to-prison pipeline. For prevention programs, the intended consequences are easy to identify and measure. These impacts include changing knowledge, attitudes, and behavior. However, there may also be unintended consequences of these programs. One such consequence may be altering students' sense of safety at school. This could happen in a variety of ways. One way in which this may occur is by simply implementing the program in schools. Regardless of whether the program is effective at reducing violence, by merely knowing that a program is being implemented in their school and something is being done about school violence, students may feel safer. This could potentially explain why in the current study treatment schools experienced an increase in school climate scores. Given the challenges faced among school administrators in keeping schools as safe environments, it stands to reason that positive efforts at targeted populations create positive attitudes of safety among non-targeted students.

Another way in which violence prevention programs may impact youths' views of school safety is by changing their knowledge of school crime. Prior to the program, youth may have misperceptions about school violence. However, by informing students of the facts of school violence- such as the fact that school violence has been decreasing or that homicides at school are a rare event- could lead to them feeling safer while at school.

In closing, the present study demonstrates the efficacy in implementing school-based violence prevention programs by providing further support for the program Too Good for Violence. This evaluation demonstrated that the program met some of its goals, such as increasing student knowledge and school climate, but fell short in other areas, such as increasing student attitudes. This type of evaluation is important because program administrators can use this information to strengthen the program, focusing on the areas in which improvement is needed.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179-211.

Ajzen, I., & Fishbien, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.

American Psychological Association (APA) (2008). Are zero tolerance policies effective in the schools? An evidentiary review and recommendations. *American Psychologist, 63*, 852-862.

Armitage, C.J. & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology, 40*, 471-499.

Astor, R.A., Benbenishty, R., Zeria, A., & Vinokur, A. (2002). School climate, observed risky behaviors, and victimization as predictors of high school students' fear and judgments of school violence as a problem. *Health Education & Behavior, 29*, 716-736.

Auter, Z. (2016). U.S. parents' fears of child's safety at school unchanged. Retrieved from http://news.gallup.com/poll/194693/parents-fears-child-safety-school-unchanged.aspx

Bacon, T.P. (2001). Impact on high school students' behaviors and protective factors: A pilot study on the Too Good for Drugs and Violence prevention program. Florida Educational Research Council, Inc., *Research Bulletin 32*, 1-40.

Bacon, T.P. (2003). The effects of the Too Good for Violence prevention program on student behaviors and protective factors. Tampa, FL: C.E. Mendez Foundation.

Bandura, A. (1973). Social learning theory of aggression. In J.F. Knutson (Ed.), *The control of aggression: Implications from basic research*. Chicago: Aldine.

Burnes, C. (2007). The effectiveness of a conflict resolution curriculum, Too Good for Violence, for fourth graders. Unpublished doctoral dissertation, Mississippi State University, Starkville.

Burns, R. & Crawford, C. (1999). School shootings, the media, and public fear: Ingredients for a moral panic. *Crime, Law, and Social Change, 32*, 147-168.

Catalano, R.F. & Hawkins, J.D. (1996). The social development model: A theory of antisocial behavior. Chapter 4 in Hawkins, J.D. *Delinquency and Crime: Current Theories* (pp. 149-197). Cambridge, Cambridge University Press.

Centers for Disease Control and Prevention (2006). *School policy and school environment questionnaire*. Atlanta, GA: Springer.

Centers for Disease Control and Prevention (CDC) (2016). School-associated violent death study.

Cohen, J., McCabe, E.M., Michelli, N.M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record, 111*, 180-213.

Cook, P.J., Gottfredson, D.C., & Na, Chongmin, N. (2010). School crime control and prevention. *Crime and Justice, 39*, 313-440.

Cotten N.U., Resnick, J., Browne, D.C., Martin, S.L, McCarraher, D.R., & Woods, J. (1994). Aggression and fighting behavior among African-American adolescents: Individual and family factors. *American Journal of Public Health, 84*, 618-622.

Department of Health and Human Services (2001). *Youth violence: A report of the Surgeon General*. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20669522

DeRosier, M.E. & Newcity, J. (2005). Students' perceptions of the school climate. *Journal of School Violence, 4*, 3-19.

Eaton, D.K. et al. (2012). Youth risk behavior surveillance-United States, 2011. *MMWR, 61*, 1-162.

Espelage, D.L., Low, S., Polanin, J.R., & Brown, E.C. (2013). The impact of a middle school program to reduce aggression, victimization, and sexual violence. *Journal of Adolescent Health, 53*, 180-186.

Exum, M.L. & Bouffard, J.A. (2010). Testing theories of criminal decision making: Some empirical questions about hypothetical scenarios. In: A. Piquero & D. Weisburd (Eds.), *Handbook of Quantitative Criminology* (pp. 581-594*).* New York, NY: Springer.

Exum, M.L. & Layana, M.C. (2018). A test of the predictive validity of hypothetical intentions to offend. *Journal of Crime and Justice, 41*, 136-154.

Exum, M.L., Turner, M.G., & Hartman, J.L. (2012). Self-reported intentions to offend: All talk and no action? *American Journal of Criminal Justice, 37*, 523-543.

Farrell, A.D., Meyer, A.L., Kung, E.M., & Sullivan, T.N. (2001). Development and evaluation of school-based violence prevention programs. *Journal of Clinical Child & Adolescent Psychology, 30*, 207-220.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Friedman, M., Grawert, A.C., & Cullen, J. (2017). Crime trends: 1990-2016. *Brennan Center for Justice*. Retrieved from https://www.brennancenter.org/sites/default/files/publications/Crime%20Trends%201990-2016.pdf

Gottfredson, G.D., Gottfredson, D.C., Payne, A.A., & Gottfredson, N.C. (2005). School climate predictors of school disorder: Results from a national study of delinquency prevention in schools. *Journal of Research in Crime and Delinquency, 42,* 412-444.

Greene, M.B. (2005). Reducing violence and aggression in schools. *Trauma, Violence, & Abuse, 6*, 236-253.

Hahn, R., Fuqua-Whitley, D., Wethington, H. et al. (2007). Effectiveness of universal school-based programs to prevent violent and aggressive behavior: A systematic review. *American Journal of Preventive Medicine, 33,* 114-129.

Hall, B.W. & Bacon, T.P. (2005). Building a foundation against violence. *Journal of School Violence, 4*, 63-83.

Hausman, A.J., Spivak, H., & Prothrow-Stith, D. (1994). Adolescents' knowledge and attitudes about and experience violence. Journal of Adolescent Health, 15, 400-406.

Hawkins, J.D., Herrenkohl, T.I., Farrington, D.P., Brewer, D., Catalano, R.F., Harachi, T.W., & Cothern, L. (2000). Predictors of youth violence. *Juvenile Justice Bulletin*, 1-11.

Hirschfield, P.J. & Celinska, K. (2011). Beyond fear: Sociological perspectives on the criminalization of school discipline. *Sociology Compass, 5*, 1-12.

Kann. L. et al. (2016). Youth risk behavior surveillance- United States, 2015. *Morbidity and Mortality Weekly Report: Surveillance Summaries, 65*, 1-174.

Kilian, J.M. & Kilian, D.W. (2011). A school intervention to increase prosocial behavior and improve academic performance of at-risk students. *Improving Schools, 14*, 65-83.

Kim, M.S. & Hunter, J.E. (1993a). Attitude-behavior relations: A meta-analysis of attitudinal relevance and topic. *Journal of Communication, 43*, 101-142.

Kim, M.S. & Hunter, J.E. (1993b). Relationships among attitudes, behavioral intentions, and behavior: A meta-analysis of past research, part 2. *Communication Research, 20*, 331-364.

Kratochwill, T.R., Albers, C.A., & Shernoff, E.S. (2004). School-based interventions. *Child and Adolescent Psychiatric Clinics of North America, 13*, 855-903.

Kraus, S.J. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin, 21*, 58-75.

Kupchik, A. & Alleyne, A. (2017). Sowing the seeds of future justice system disparities: School punishment and the school-to-prison pipeline. In J.T. Ulmer & M.S.

Bradley (Eds.) *Handbook on Punishment Decisions: Locations of Disparity* (67-80). New York, NY: Routledge.

Kupchik, A. & Bracy, N.L. (2009). The news media on school crime and violence: Constructing dangerousness and fueling fear. *Youth Violence and Juvenile Justice, 7*, 136-155.

Lawrence, R. (2006). *School crime and juvenile justice.* New York, NY: Oxford University Press.

Lipsey, M.W. & Derzon, J.H. (1998). Predictors of violent and serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D.P. Farrington (Eds.) *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions* (86-105). Thousand Oaks, CA: Sage Publications.

Lösel, F., & Farrington, D.P. (2012). Direct protective and buffering protective factors in the development of youth violence. *American Journal of Preventive Medicine, 43*, S8-S23.

Mallett, C.A. (2016). The school-to-prison pipeline: From school punishment to rehabilitative inclusion. *Preventing School Failure, 60,* 296-304.

Martinez, S. (2009). A system gone beserk: how are zero-tolerance policies really affecting schools? *Preventing School Failure: Alternative Education for Children and Youth, 53(3),* 153-158.

Mendez Foundation (2018). Too Good Programs. Retrieved from https://toogoodprograms.org/.

Muschert, G.W., & Peguero, A.A. (2010). The Columbine effect and school antiviolence policy. *Research in Social Problems and Public Policy, 17*, 117-148.

Musu-Gillette, L., Zhang, A., Wang, K., Zhang, J., & Oudekerk, B.A. (2017). *Indicators of school crime and safety: 2016*. U.S. Departments of Education and Justice. Washington, DC.

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K.L., Seybolt, D., Morriseey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist, 58*, 449-456.

Nekvasil, E., Cornell, D., & Huang, F. (2015). Prevalence and offense characteristics of multiple casualty homicides: Are schools at higher risk than other locations? *Psychology of Violence, 5*, 236-345.

Office of Juvenile Justice and Delinquency Prevention (OJJDP) (2012). Program profile: Too Good for Violence. Retrieved from https://www.crimesolutions.gov/ProgramDetails.aspx?ID=240

Pardini, D.A., Loeber, R., Farrington, D.P., & Stouthamer-Loeber, M. (2012). Identifying direct protective factors for nonviolence. *American Journal of Preventive Medicine, 43*, S28-S40.

Perry, D.G., Perry, LC. & Rasmussen, P. (1986). Cognitive social learning mediators of aggression. *Child Development, 57*, 700-711.

Person, A.E., Moiduddin, E., Hgue-Angus, M., & Malone, L.M. (2009). Survey of outcomes measurement in research on character education programs. Washington, DC: National Center for Educational Evaluations and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Phi Delta Kappan (PDK) (2017). PDK poll of the public's attitudes toward the public schools.

Randall, D.M. & Wolff, J.A. (1994). The time interval in the intention-behaviour relationship: Meta-analysis. *British Journal of Social Psychology, 33*, 405-418.

Reaves, S., McMahon, S.D., Duffy, S.N., & Ruiz, L. (2018). The test of time: A meta-analytic review of the relation between school climate and problem behavior. *Aggression and Violent Behavior, 39*, 100-108.

Reinhart, R.J. (2017). Cybercrime tops Americans' crime worries. Retrieved from http://news.gallup.com/poll/221270/cybercrime-tops-americans-crime-worries.aspx

Resnick, M.D., Ireland, M., & Borowsky, I. (2004). Youth violence perpetration: What protects? What predicts? Findings from the national longitudinal study of adolescent health. *Journal of Adolescent Health, 35*, 424.e1– 424.e10.

Sheppard, B.H., Hartwick, J., & Warshaw, P.R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research, 15*, 325-343.

Slaby, R.G. & Guerra, N.G. (1988). Cognitive mediators of aggression in adolescent offenders: 1, Assessment. *Developmental Psychology, 24*, 580-588.

Spaccerlli, S., Coatsworth, J.D., & Bowden, B.S. (1995). Exposure to serious family violence among incarcerated boys: Its association with violent offending and potential mediating variables. *Violence and Victims, 10*, 163-182.

Steffgen, G., Recchia, S., & Viechtbauer, W. (2013). The link between school climate and violence in school: A meta-analytic review. *Aggression and Violent Behavior, 18*, 300-309.

Substance Abuse and Mental Health Services Administration (SAMHSA) (2017). Too Good for Violence K-5 Intervention Summary. National Registry of Evidence-based Programs and Practices. Retrieved from https://nrepp.samhsa.gov/ProgramProfile.aspx?id=1261#hide3

Tatum, B. L. (2017). *Crime, violence and minority youths*. Routledge.

Teasley, M.L. (2014). Shifting from zero tolerance to restorative justice in schools. *Children & Schools, 36,* 131-133.

Turner, M. G., Hartman, J. L., Exum, M. L., & Cullen, F. T. (2007). Examining the cumulative effects of protective factors: Resiliency among a national sample of high-risk youths. *Journal of Offender Rehabilitation, 46*(1-2), 81-111.

U.S. Department of Education (2013). *Back to school statistics*. Washington, DC: National Center for Education Statistics, Institute of Education Services.

U.S. Department of Education (2006). WWC intervention report: Too Good For Violence. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/WWC_Violence_091406.pdf

Vaughn, M.G., Salas-Wright, C.P., DeLisi, M., & Maynard, B.R. (2014). Violence and externalizing behavior among youth in the United States: Is there a severe 5%? *Youth Violence and Juvenile Justice, 12*, 3-21.

Vernberg, E.M., Jacobs, A.K., & Hershberger, S.L. (1999). Peer victimization and attitudes about violence during early adolescence. *Journal of Clinical Child Psychology, 28*, 386-395.

Walker, H.M. & Shinn, M.R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. In M.R. Shinn, H.M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: preventive and remedial approaches* (pp. 1-25). Washington, DC: National Association of School Psychologists.

Wilson, S.J., & Lipsey, M.W. (2007). School-based interventions for aggressive and disruptive behavior: Update of a meta-analysis. *American Journal of Preventive Medicine, 33*, 130-143.

Zhang, A., Musu-Gillette, L., & Oudekerk, B.A. (2016). *Indicators of school crime and safety: 2015*. National Center for Education Statistics, U.S. Department of Education and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, D.C.

Zins, J.E. & Elias, M.J. (2007). Social and emotional learning: Promoting the development of all students. *Journal of Educational and Psychological Consultation, 17*, 233-255.

Appendix A

Student Knowledge – Middle School Version

1. Which of these behaviors describes bullying behavior?
   A. repeated threats, intimidation, or physical harm
   B. harassing statements posted online about someone
   C. repeated naming calling, put downs, and teasing
   D. all of the above

2. What is the purpose of the Win-Win approach to resolving a conflict?
   a. Both people avoid dealing with the conflict altogether.
   b. Both people share or split the difference.
   c. Both people win nothing and lose nothing.
   d. One person wins and the other loses.

3. Some teens don't resolve conflicts peacefully because they
   A. are bad people.
   B. want to be unhealthy.
   C. cannot manage their emotions in healthy ways.
   D. are cool, popular, and well respected.

4. Demonstrating respect for yourself and others shows
   A. your awareness of your impact on the world around you.
   B. your empathy for others.
   C. that you value yourself and others even if you have different values or opinions.
   D. all of the above.

5. Garret and Colin are working on a school project together. Garrett wants to meet before school to work on the project, but Colin wants to work on the project after school. What approach is the best way to resolve the conflict?
   a. Steer Clear
   b. Avoid it
   c. Compromise
   d. Compete

6. The characteristics of constructive criticism include
   A. respect, specific suggestions for improvement, and name-calling.
   B. respect, specific suggestions for improvement, and frustration.
   C. respect, specific suggestions for improvement, and focus on what a person can change.
   D. respect, specific suggestions for improvement, and an aggressive tone of voice.

7. Charles keeps harassing and threatening you between classes. Sometimes he knocks your books out of your hands and laughs at you. As the target of Charles' bullying behavior, you should use which healthy response?
a. Don't tell a trusted adult that you are being bullied.
B. Be assertive with Charles and say, "People would respect you more if you didn't push them around."
c. Isolate yourself from others.
d. Convince yourself that you're not important.

8. Ella was proud of her ability to play the violin, but that changed after she started dating Owen. Owen laughs at her playing and tells her that she isn't very good. What unhealthy qualities exist in their relationship?
A. insults, trust, and support
B. insults, trust, and understanding
C. insults, humiliation, and respect
D. insults, humiliation, and discouragement

9. The Active Listener
A. makes eye contact, interrupts, and thinks of what to say next.
B. makes eye contact, asks clarifying questions, and has attentive posture.
C. makes eye contact, asks clarifying questions, and is texting someone else.
D. looks away, interrupts, and thinks of what to say next.

10. Which of the following is <u>not</u> part of setting and reaching a goal?
a. Name a reachable goal.
b. Set a date for reaching your goal.
c. Ask someone else what your goal should be.
d. Say, "I can".

11. The Assertive Speaker
A. stands tall, makes eye contact, and speaks in a confident tone.
B. stands tall, makes eye contact, and talks quietly.
C. stands tall, makes eye contact, and uses an aggressive tone.
D. slouches, makes eye contact, and talks quietly.

12. Before Sophia started dating Aiden she wasn't really interested in sports, but now she goes to most of Aiden's baseball games to support and encourage him. What healthy qualities exist in their relationship?
A. care, support, and respect
B. care, support, and forgiveness
C. care, support, and isolation
D. all of the above

13. Which of the following statements is true? Negotiation is used in a conflict to
A. demand what you want.
B. pressure others until they give up.
C. cooperate and work to reach a resolution that everyone agrees upon.
D. ignore the viewpoints of others.

14. You notice that Kyla keeps threatening Amy at the bus stop. As the witness to Kyla's bullying behavior, which of the following is a healthy response for you to use?
a. Put Kyla down by telling her that everyone hates her.
b. Encourage Kyla to work out her aggression in a healthy way like joining a sports team.
c. Pretend that you didn't see the situation and walk away.
d. Tell Amy that she's a wimp, and that she should try to avoid Kyla as much as possible.

15. Which of the following is most likely to help you get what you want in life?
A. peer pressure
B. goal setting
C. advertising
D. all of the above

16. Which of the following actions demonstrates disrespect?
A. frequently being late to appointments
B. holding the door open for someone
C. shaking someone's hand to introduce yourself
D. making eye contact during a conversation

17. Who should set your goals?
A. your friends
B. advertisers
C. you
d. Your teacher

18. Teen dating violence is...
A. only in the movies.
B. a way of showing affection.
C. only verbal putdowns.
D. any behavior used to manipulate, hurt, control, frighten, or intimidate a dating partner.

19. Joe wanted Rob to steal candy from the quick mart up the street. Rob said, "Why are you pressuring me?
I said no." What is the name of the peer-pressure refusal strategy Rob used?
a. Make an Excuse
b. Ignore
c. Broken Record
d. Reverse the Pressure

20. What does empathy make you feel?
A. suspicious of peer pressure

B. more connected with the feelings of others
C. assertive
D. aggressive

Appendix B

Student Knowledge – High School Version

Directions: Read each question and circle the letter of the correct answer.

1. What is the first step in reaching a goal?
a. Getting advice from your friends
b. Picturing yourself reaching your goal
c. Naming your goal
d. Changing your attitude

2. Which part of the brain is most affected by underage drinking?
a. Cerebellum
b. Hippocampus
c. Medulla Oblongata
d. Cortex

3. Who develops the alcohol industries advertising procedures?
a. The alcohol industry
b. The Food and Drug Administration
c. U.S. Bureau of Alcohol, Tobacco, and Firearms
d. U.S. Department of Advertising

4. What should you do when you achieve a goal?
a. Set another goal
b. Tell yourself good job
c. Nothing
d. Start the same goal over again

5. What is the first step to take when making a decision?
a. Think about what your friends are doing
b. List the choices and consequences
c. Ask other people for advice
d. Stop and think

6. What percentage of our communication is done with body language?
a. 37%
b. 85%
c. 55%
d. 10%

7. What type of communication can help you get what you want from a situation without any cost or negative consequences to yourself?
   a. Aggressive
   b. Assertive
   c. Passive
   d. Active listening

8. Which of the following is not a tip for de-escalating a conflict?
   a. Call the other person by name
   b. Use a calm voice
   c. Relax your body
   d. Fight your way out of the situation

9. What is a stereotype?
   a. Intentional harm done to another person
   b. An unjustified belief that all members of a group are the same
   c. Physical or emotional harm done to another group
   d. A belief that everyone is different

10. Stacey and Tanya waited for fifteen minutes to try on dresses while the clerk waited on an adult who came into the store after they did. This is an example of what type of discrimination?
   a. Age discrimination
   b. Socio-economic discrimination
   c. Racial discrimination
   d. Physical discrimination

11. If a woman drinks during her pregnancy, the baby could be born with what?
   a. Fetal Alcohol Syndrome
   b. Alcohol Consumption Syndrome
   c. Fetus Alcohol Infection
   d. Prenatal Toxic Alcohol Syndrome

12. Which of the following is not a characteristic of a healthy relationship?
   a. Support
   b. Trust
   c. Control
   d. Respect

13. What drug is also referred to as a date rape drug?
   a. LSD
   b. GHB
   c. THC
   d. Cocaine

14. Which of the following statements is true?

a. Smoking marijuana increases the heart rate.
b. Marijuana use improves concentration.
c. Marijuana is the number one drug used by teenagers.
d. Marijuana users experience weight loss.

15. Which of the following statements is true?
a. Abusing prescription drugs is safe, because they come from a pharmacy.
b. A person cannot overdose from prescription medications.
c. Abusing prescription and over-the-counter medications can lead to many harmful consequences.
d. Over-the-counter medications are not addictive.

16. What kind of drugs are cocaine and methamphetamine?
a. Depressant
b. Stimulant
c. Hallucinogen
d. Cannabis

17. What is the number one drug used by teenagers?
a. Marijuana
b. Tobacco
c. Alcohol
d. Ecstasy

18. What is the first stage of drug addiction for a teenager?
a. Experimental use
b. Dependency
c. Regular use
d. Addiction

19. Which of the following statements is true?
a. Most kids my age smoke marijuana.
b. Marijuana is not addictive.
c. Marijuana effectively cures glaucoma.
d. Marijuana use decreases reaction time.

20. Which of the following is not a tip for setting a reachable goal?
a. Set goals that are important to you
b. Set goals that are possible
c. Set goals that are specific
d. Set goals that can be evaluated

Appendix C

Student Attitudes Toward Violence – Middle School Version

1. I have the skills to figure out how to reach my goals.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

2. When I set a goal, I picture myself reaching that goal.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

3. When I set a goal, I think about what I need to do to reach my goal.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

4. I think about the consequences or what might happen before I make a decision.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

5. I make good decisions because I stop and think.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

6. After I've acted on my decisions, I reflect on whether or not they had a positive outcome.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

7. I use different strategies to calm myself down when my body signals that I am upset.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

8. When I start to feel angry, I try to relax and say positive things to myself.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

9. I know several effective skills for managing my emotions.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

10. When I am under a lot of pressure, I can take a few deep breaths or find something to laugh about.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree
11. I know healthy ways to help me relax when I feel stressed.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

12. I am good at recognizing and responding to the emotions of others.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

13. When I talk to other students, I stand up straight, look them in the eye, and use a confident tone of voice.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

14. I watch other students' body language to help me understand what they are trying to say.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

15. I'll ask questions if I am not sure what another person is trying to communicate to me.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

16. I can tell how students feel by listening to their tone of voice.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

17. I look at students' facial expressions to help me understand what they are trying to tell me.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

18. I use active listening skills when interacting with others.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

19. If a group of kids called me over to try some marijuana, I could just ignore them.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

20. I know how to stand up for myself if a friend wanted me to do something I knew was wrong.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

21. If someone started calling me names in the hallway, I could just walk away.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

22. If a friend of mine had a cigarette and wanted us to smoke it, I could say, "I have a better idea, let's go outside and do something else."
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

23. I am confident that I can use my peer-pressure refusal strategies to avoid fighting, smoking, drinking, or using marijuana.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

24. I pick my friends based on their character, shared values, and who will support me in making healthy decisions.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

25. I am self-confident because I know my abilities and talents.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

26. I treat myself with respect.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

27. I feel good about myself.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

28. I treat other people with respect.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

29. I accept people who are different from me.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

30. I try to be kind and supportive of others.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

31. I use my skills to solve my conflicts non-violently.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

32. In an argument, I ask to hear the other student's point of view or side of the story.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

33. I have an argument, I try to work it out with the other student.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

34. If I have a conflict with someone and know I made a mistake, I am willing to say "I'm sorry" and talk it out.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

35. I try to use peaceful ways to work out disagreements or conflicts with others.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

36. One approach I might use in a conflict when two of us can't agree is to just "Agree to Disagree."
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

37. If I start to become angry, I know healthy ways to maintain my self-control.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

38. It is important to know the risk factors that may cause an argument to escalate into violence.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

39. When I am in a disagreement, I try to use a calm voice and relax my body.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

40. I am able to de-escalate a conflict to keep it from becoming a fight.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

41. If an argument is escalating, I try to identify the problem without blaming the other person.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

42. In a conflict, I might use words like "Let's", "We", "Our", or "Together" to indicate I want to cooperate in working towards a solution.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

43. I might try to cope with bullying by walking away, trying to laugh it off or some other peaceful action.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

44. Kids shouldn't encourage bullying behavior by standing by to watch, joining in, or laughing.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

45. If I saw someone being bullied, I would try to get the bully to stop.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

46. I might respond to a bully's teasing or name calling by ignoring it, changing the subject, or saying "stop bothering me."
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

47. Bullying behavior should not be tolerated.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

48. If I witnessed a student being bullied, I would report it to a responsible adult.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

49. I believe it is wrong to prejudge or discriminate against others.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

50. It is wrong to hit, threaten, or insult other people.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

51. I believe it is wrong to spread rumors or post mean messages online about others.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

52. It is wrong to use your fists, push, or shove others to resolve conflicts.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

53. I believe it is wrong to intimidate, use name calling, or tease others to hurt them.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

54. It is wrong for a person to bully someone, no matter the reason.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

55. Do you know the name(s) of the School Resource Officer(s) in your school?
A. Yes B. No

56. How comfortable would you be in approaching a School Resource Officer to report a crime?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

57. How comfortable would you be in approaching a School Resource Officer to report a problem a student was having at school?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

58. How comfortable would you be in saying "hello" when you pass a School Resource Officer in the hallway or on school grounds?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

59. How comfortable would you be in helping a School Resource Officer solve a problem at school?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

60. Do you know the name(s) of any local police officers that patrol your neighborhood?
A. Yes B. No

61. How comfortable would you be in approaching a local police officer that patrols your neighborhood to report a crime?

A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

62. How comfortable would you be in approaching local police officers that patrol your neighborhood to report a problem a student was having at school?
    A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

63. How comfortable would you be in saying "hello" when you pass local police officers that patrol your neighborhood?
    A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

64. How comfortable would you be in helping local police officers that patrol your neighborhood to solve a problem in your neighborhood?
    A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

Appendix D

Student Attitudes Towards Violence Subscales- Middle School Version

Scoring the Student Risk and Protective Factors Survey

1. Assign a point value to each item response as follows: A. Strongly agree = 5 points, B. Agree = 4 points, C. Not sure = 3 points, D. Disagree = 2 points, and E. Strongly disagree = 1 point.
2. Score the Risk and Protective Factors Subscales by adding the total number of points of the responses for each subscale and dividing the number of items in each subscale. That will determine each student's mean score on that subscale. The highest possible mean score for the subscales is 5.0 and the lowest possible mean score is 1.0. The total score is computed by generating the average across all survey items. Higher mean scores indicate more positive behaviors, attitudes, perceptions, and skills. Lower mean scores indicate less desirable levels of behaviors, attitudes, perceptions and skills.
3. If a student failed to answer a subscale item, then reduce the divisor by one (i.e., 5 rather than 6 items) when computing that student's subscale score. If a student failed to answer numerous items on a subscale, then the subscale results for that student are not reliable, and the student's score on that subscale should not be computed, nor should it be included in the pre-to post-survey comparison.

Risk and Protective Factors Subscales:

Goal Setting and Decision Making

1. I have the skills to figure out how to reach my goals.
2. When I set a goal, I picture myself reaching that goal.
3. When I set a goal, I think about what I need to do to reach my goal.
4. I think about the consequences or what might happen before I make a decision.
5. I make good decisions because I stop and think.
6. After I've acted on my decisions, I reflect on whether or not they had a positive outcome.

Managing Emotions

7. I use different strategies to calm myself down when my body signals that I am upset.
8. When I start to feel angry, I try to relax and say positive things to myself.
9. I know several effective skills for managing my emotions.
10. When I am under a lot of pressure, I can take a few deep breaths or find something to laugh about.
11. I know healthy ways to help me relax when I feel stressed.
12. I am good at recognizing and responding to the emotions of others

Effective Communication

13. When I talk to other students, I stand up straight, look them in the eye, and use a confident tone of voice.
14. I watch other students' body language to help me understand what they are saying.
15. I'll ask questions if I am not sure what another person is trying to communicate to me.
16. I can tell how students feel by listening to their tone of voice.
17. I look at students' facial expressions to help me understand what they are trying to tell me.
18. I use active listening skills when interacting with others.

Social and Peer Resistance

19. If a group of kids called me over to try some marijuana, I could just ignore them.
20. I know how to stand up for myself if a friend wanted me to do something I knew was wrong.
21. If someone started calling me names in the hallway, I could just walk away.
22. If a friend of mine had a cigarette and wanted us to smoke it, I could say, "I have a better idea, let's go outside and do something else."
23. I am confident that I can use my peer-pressure refusal strategies to avoid fighting, smoking, drinking or using marijuana.
24. I pick my friends based on their character, shared values, and who will support me in making healthy decisions.

Respect for Self and Others

25. I am self-confident because I know my abilities and talents.
26. I treat myself with respect.
27. I feel good about myself.
28. I treat other people with respect.
29. I accept people who are different from me.
30. I try to be kind and supportive of others.

Conflict Resolution

31. I use my skills to solve my conflicts nonviolently.
32. In an argument, I ask to hear the other student's point of view or side of the story.
33. If I have an argument, I try to work it out with the other student.
34. If I have a conflict with someone and know I made a mistake, I am willing to say "I'm sorry" and talk it out.
35. I try to use peaceful ways to work out disagreements or conflicts with others.
36. One approach I use in a conflict when two of us can't agree is just to "Agree to Disagree."

Anger Management

37. If I start to become angry, I know healthy ways to maintain my self-control.
38. It is important to know the risk factors that may cause an argument to escalate into violence.
39. When I am in a disagreement, I try to use a calm voice and relax my body.
40. I am able to de-escalate a conflict to keep it from becoming a fight.
41. If an argument is escalating, I try to identify the problem without blaming the other person.
42. In a conflict, I might use words like “Lets”, “We”, “Our”, or “Together” to indicate I want to cooperate in working towards a solution.

Bullying Awareness

43. I might try to cope with bullying by walking away, trying to laugh it off or some other peaceful action.
44. Kids shouldn’t encourage bullying behavior by standing by to watch, joining in, or laughing.
45. If I saw someone being bullied, I would try to get the bully to stop.
46. I might respond to a bully’s teasing or name calling by ignoring it, changing the subject, or saying “stop bothering me.”
47. Bullying behavior should not be tolerated.
48. If I witnessed a student being bullied, I would report it to a responsible adult.

Attitudes Toward Violence

49. I believe it is wrong to prejudge or discriminate against others.
50. It is wrong to hit, threaten, or insult other people.
51. I believe it is wrong to spread rumors or post mean messages online about others.
52. It is wrong to use your fists, push, or shove others to resolve a conflict.
53. I believe it is wrong to intimidate, use name calling, or tease others to hurt them.
54. It is wrong for a person to bully someone, no matter the reason.

Appendix E

Student Attitudes Toward Violence – High School Version

1. Setting goals helps me figure out what I want to do.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

2. When I set a goal, I think about the steps I will take to achieve my goal.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

3. I have the skills to determine how to reach my goals.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

4. If I choose to drink alcohol, I risk not reaching my goals.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

5. I think about the consequences or what might happen before I make a decision.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

6. My ability to make good decisions could change if I drank alcohol.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

7. Drinking may affect my decision making regarding sexual situations.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

8. I make good decisions because I stop and think.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

9. Advertisements try to influence and manipulate my attitude about drinking alcohol.
   A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

10. I can pick out the pictures and messages in ads that make it look like people who drink are having more fun.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

11. Society teaches us that many celebrations and holidays revolve around drinking.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

12. I can pick out the lyrics in songs that glamorize drinking alcohol.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

13. I use active listening skills.
    A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

14. I repeat what someone says to make sure I heard what they said correctly.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

15. I look at people's faces and body language to understand what they are saying.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

16. I use assertive communication skills.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

17. In an argument, I listen to the other side of the story.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

18. I can identify risk factors that may cause a conflict to escalate.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

19. When I have a disagreement I try to use a calm voice and watch my body language.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

20. I try to talk out a conflict so it doesn't become violent.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

21. I try not to prejudge people based on how they look.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

22. I know the difference between healthy and unhealthy relationships.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

23. If my friends discriminated against another person, I would try to get them to stop.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

24. I avoid people who try to get me to do things that could get me in trouble.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

25. I have a plan to handle peer pressure situations.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

26. I have the skills to recognize and avoid risky situations.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

27. I can handle peer pressure situations assertively.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

28. I am confident that I can use peer refusal strategies to avoid pressure to smoke, drink, or use

marijuana.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

29. Teenagers are at great risk of harming themselves if they take one or two drinks of an alcoholic beverage every day.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

30. Teenagers are at great risk of harming themselves if they smoke marijuana regularly.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

31. Teenagers are at great risk of harming themselves if they abuse prescription medications.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

32. Teenagers are at great risk of harming themselves if they abuse over-the-counter medications.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

33. I have decided I won't smoke cigarettes during the next year.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

34. I have decided I won't drink alcohol during the next year.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

35. I have decided I won't use marijuana during the next year.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

36. I have decided I won't get into any fights where someone could be physically hurt during the next year.
A. Strongly Agree B. Agree C. Not Sure D. Disagree E. Strongly Disagree

37. Do you know the name(s) of the School Resource Officer(s) in your school?
B. Yes B. No

38. How comfortable would you be in approaching a School Resource Officer to report a crime?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

39. How comfortable would you be in approaching a School Resource Officer to report a problem a student was having at school?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

40. How comfortable would you be in saying “hello” when you pass a School Resource Officer in the hallway or on school grounds?

A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

41. How comfortable would you be in helping a School Resource Officer solve a problem at school?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

42. Do you know the name(s) of any local police officers that patrol your neighborhood?
A. Yes B. No

43. How comfortable would you be in approaching a local police officer that patrols your neighborhood to report a crime?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

44. How comfortable would you be in approaching local police officers that patrol your neighborhood to report a problem a student was having at school?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

45. How comfortable would you be in saying "hello" when you pass local police officers that patrol your neighborhood?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

46. How comfortable would you be in helping local police officers that patrol your neighborhood to solve a problem in your neighborhood?
A. Very Comfortable B. Somewhat Comfortable C. Neither Comfortable nor Uncomfortable D. Somewhat Uncomfortable E. Very Uncomfortable

Appendix F

Student Attitudes Towards Violence Subscales- High School Version

Scoring the Survey Items

Compute the average score for the Student Survey by summing the point values of the responses (1 to 5) and dividing by the number of responses given. Protective Factor Subscales are scored similarly—adding the point values for the items in each scale and dividing by the number of responses given. Blank items are not counted in the number of responses. The maximum possible average score for the survey and subscales is 5.00 and the lowest score is 1.00. Higher scores indicate more positive attitudes, perceptions, and skills. Lower scores indicate less desirable levels of attitudes, perceptions, and skills.

Student Protective Factor Items

Protective Factor Subscales:

Goal Setting

1. Setting goals helps me figure out what I want to do.
2. When I set a goal I think about the steps I will take to achieve my goal.
3. I have the skills to determine how to reach my goals.
4. If I choose to drink alcohol, I risk not reaching my goals.

Decision Making

5. I think about the consequences of what might happen before I make a decision.
6. My ability to make good decisions could change if I drank alcohol.
7. Drinking alcohol may affect my decision making regarding sexual situations.
8. I make good decisions because I stop and think.

Media & Social Influences

9. Advertisements try to influence and manipulate my attitude about drinking alcohol.
10. I can pick out the pictures and messages in ads that make it look like people who drink are having more fun.
11. Society teaches us that many celebrations and holidays revolve around drinking.
12. I can pick out the lyrics in songs that glamorize drinking alcohol.

Communication

13. I use active listening skills.
14. I repeat what someone says to make sure I heard what they said correctly.
15. I look at people’s faces and body language to understand what they are saying.
16. I use assertive communication skills.

Conflict Resolution

17. In an argument, I listen to the other side of the story.
18. I can identify risk factors that may cause a conflict to escalate.
19. When I have a disagreement I try to use a calm voice and watch my body language.
20. I try to talk out a conflict so it doesn't become violent.

Social Competence

21. I try not to prejudge people based on how they look.
22. I know the difference between healthy and unhealthy relationships.
23. If my friends discriminated against another person, I would try to get them to stop.
24. I avoid people who try to get me to do things that could get me in trouble.

Peer Resistance

25. I have a plan to handle peer pressure situations.
26. I have the skills to recognize and avoid risky situations.
27. I can handle peer pressure situations assertively.
28. I am confident that I can use peer refusal strategies to avoid pressure to smoke, drink, or use marijuana.

Harmful Effects

29. Teenagers are at great risk of harming themselves if they take one or two drinks of an alcoholic beverage everyday.
30. Teenagers are at great risk of harming themselves if they smoke marijuana regularly.
31. Teenagers are at great risk of harming themselves if they abuse prescription medications.
32. Teenagers are at great risk of harming themselves if they abuse over-the-counter medications.

Student Intention Items

Intention items can be dichotomized to examine changes in categories from those least likely to try or use a substance or engage in aggressive behavior (scores of 5 and 4 scored/coded as Category 1) from those more likely to engage (scores of 3,2, and 1 scored/coded as Category 2). Changes in the number of participants within categories can be examined over time relative to changes in the control group.

Intentions to Use Drugs and Violence

33. I have decided I won't smoke cigarettes during the next year.
34. I have decided I won't drink alcohol during the next year.
35. I have decided I won't use marijuana during the next year.
36. I have decided I won't get into any fights where someone could be physically hurt during the next year.

Appendix G

School Climate Survey

Middle - High School Students

We want to know what YOU think about your school.

This is NOT a test.

There are NO wrong answers. The information from the survey will help us understand what you think about your school experience.

YOUR answers are confidential.

Your answers will be combined with those of other students. No one will be told how you answered. DO NOT write your name on the survey.

This survey is voluntary.

You do NOT have to answer any question if you do not want to, but we hope you will answer as many questions as you can.

INSTRUCTIONS

Please read each question carefully, and circle the number under the one answer that most closely fits your opinion. Be sure to answer every question, and when you are done, please review your survey to ensure that it is fully completed. We appreciate your taking the time to do the survey.

BEGIN YOUR SURVEY BELOW ↓

1. Please indicate how much you agree or disagree with the following statements about your school:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. The length of the school day is about right.	1	2	3	4	5
b. I often do not have enough time to get from one class to the next.	1	2	3	4	5
c. My school is kept clean.	1	2	3	4	5
d. I like my school building.	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

2. Please indicate how much you agree or disagree with the following statements about students at your school:

Most students in my school…	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
a. give up when they cannot solve a problem easily.	1	2	3	4	5
b. do all their homework.	1	2	3	4	5
c. think it is OK to cheat if other students are cheating.	1	2	3	4	5
d. try to do a good job on schoolwork even when it is not interesting.	1	2	3	4	5
e. do their best, even when their work is difficult.	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

3. Please indicate how much you agree or disagree with the following statements about your teachers:

My teachers…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. give me a lot of encouragement.	1	2	3	4	5
b. make learning interesting.	1	2	3	4	5
c. encourage students to share their ideas about things we are studying in class.	1	2	3	4	5
d. do not notice if I have trouble learning something.	1	2	3	4	5
e. will help me improve my work if I do poorly on an assignment.	1	2	3	4	5
f. think all students can do challenging school work.	1	2	3	4	5
g. often assign homework that helps me learn.	1	2	3	4	5
h. do not listen carefully enough to me when I speak in class.	1	2	3	4	5
i. notice when I am doing a good job and let me know about it.	1	2	3	4	5
j. provide me with lots of chances to be part of class discussions or activities.	1	2	3	4	5
k. will give me extra help at school outside of our regular class.	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

4. Please indicate how much you agree or disagree with the following:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Teachers at my school treat students with respect.	1	2	3	4	5
b. Students in my school treat each other with respect.	1	2	3	4	5
c. Adults in this school are often too busy to give students extra help.	1	2	3	4	5
d. Most students in my school are easily able to work out disagreements with other students.	1	2	3	4	5
e. There are lots of chances for students in my school to talk with a teacher one-on-one.	1	2	3	4	5
f. Students at this school are often bullied.	1	2	3	4	5
g. Students at this school are often teased or picked on.	1	2	3	4	5
h. Harassment, intimidation, and bullying by other students are a problem at my school.	1	2	3	4	5
i. Violence is a problem at my school.	1	2	3	4	5
j. I sometimes stay home because I do not feel safe at school.	1	2	3	4	5
k. Adults in this school are usually willing to make the time to give students extra help.	1	2	3	4	5
l. My teachers really care about me.	1	2	3	4	5
m. Adults in this school apply the same rules to all students equally.	1	2	3	4	5
n. Students are treated fairly by the adults in the school.	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

5. Please indicate how much you agree or disagree with the following statements about your school:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. My school has clear rules and consequences for behavior.	1	2	3	4	5
b. I worry about crime and violence in my school.	1	2	3	4	5

6. Please indicate how much you agree or disagree with the following statements about your school:

Most students in my school…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. are well-behaved.	1	2	3	4	5
b. do <u>not</u> really care about each other.	1	2	3	4	5
c. help each other when asked.	1	2	3	4	5
d. just look out for themselves.	1	2	3	4	5
e. treat each other well.	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

7. How safe do you feel…	**Not Safe**	**Somewhat Safe**	**Mostly Safe**	**Very Safe**
a. outside around the school?	1	2	3	4
b. in the hallways and bathrooms of the school?	1	2	3	4
c. in your classes?	1	2	3	4

8. Please indicate how much you agree or disagree with the following:

Thinking back over the past year in school, how often did you…	**Never**	**Seldom**	**Sometimes**	**Often**	**Almost Always**
a. enjoy being in school?	1	2	3	4	5
b. hate being in school?	1	2	3	4	5
c. try to do your best work in school?	1	2	3	4	5
d. feel that the school work you were assigned was meaningful and important?	1	2	3	4	5

PLEASE GO TO THE NEXT PAGE →

9. Please indicate how much you agree or disagree with the following:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Students have lots of chances in my school to get involved in sports, clubs, and other school activities outside of class.	1	2	3	4	5
b. I have opportunities to express myself at school.	1	2	3	4	5
c. Students help decide what goes on in my school.	1	2	3	4	5
d. I wish I went to a different school.	1	2	3	4	5
e. In my school, students have lots of chances to help decide things, like activities and rules.	1	2	3	4	5
f. I feel like I belong at this school.	1	2	3	4	5
g. Teachers and other adults here listen to students' ideas about the school.	1	2	3	4	5
h. My family wants me to do well in school.	1	2	3	4	5
i. My parents ask if I've gotten my homework done.	1	2	3	4	5
j. My parents would punish me if I skipped school.	1	2	3	4	5

THIS IS THE END OF THE SURVEY. THANK YOU!

PLEASE GO TO THE NEXT PAGE →

Appendix H

School Climate Survey- Student Version Subscales

Physical Environment

1a. The length of the school day is about right.

1b. I often do not have enough time to get from one class to the next.

1c. My school is kept clean.

1d. I like my school building.

Teaching and Learning

3a. My teachers give me a lot of encouragement.

3b. My teachers make learning interesting.

3c. My teachers encourage students to share their ideas about things we are studying in class.

3d. My teachers do not notice if I have trouble learning something.

3e. My teachers will help me improve my work if I do poorly on an assignment.

3f. My teachers think all students can do challenging school work.

3g. My teachers often assign homework that helps me learn.

3h. My teachers do not listen carefully enough to me when I speak in class.

3i. My teachers notice when I am doing a good job and let me know about it.

3j. My teachers provide me with lots of chances to be part of class discussions or activities.

3k. My teachers will give me extra help at school outside of our regular class.

4a. Teachers at my school treat students with respect.

4c. Adults in the school are often too busy to give students extra help.

4k. Adults in this school are usually willing to make the time to give students extra help.

8d. Thinking back over the past year in school, how often did you feel that the school work you were assigned was meaningful and important?

Morale in the School Community

8a. Thinking back over the past year in school, how often did you enjoy being in school?

8b. Thinking back over the past year in school, how often did you hate being in school?

9a. Students have lots of chances in my school to get involved in sports, clubs, and other school activities outside of class.

9b. I have opportunities to express myself at school.

9c. Students help decide what goes on in my school.

9d. I wish I went to a different school.

9e. In my school, students have lots of chances to help decide things, like activities and rules.

9f. I feel like I belong at this school.

9g. Teachers and other adults here listen to students' ideas about the school.

Student Relationships

4b. Students in my school treat each other with respect.

4f. Students at this school are often bullied.

4g. Students at this school are often teased or picked on.

4h. Harassment, intimidation, and bullying by other students are a problem at my school.

Parental Support

9h. My family wants me to do well in school.

9i. My parents ask if I've gotten my homework done.

9j. My parents would punish me if they found out I skipped school.

Safety

4j. I sometimes stay home because I do <u>not</u> feel safe at school.

7a. How safe do you feel outside around the school?

7b. How safe do you feel in the hallways and bathrooms of the school?

7c. How safe do you feel in your classes?

Emotional Environment

5a. My school has clear rules and consequences for behavior.

2b. Most students in my school do all their homework.

2c. Most students in my school think it is OK to cheat if other students are cheating.

2d. Most students in my school try to do a good job on schoolwork even when it is not interesting.

2e. Most students in my school do their best, even when their work is difficult.

4d. Most students in my school are easily able to work out disagreements with other students.

4e. There are lots of chances for students in my school to talk with a teacher one-on-one.

4l. My teachers really care about me.

4m. Adults in my school apply the same rules to all students equally.

4n. Students are treated fairly by the adults in the school.

Appendix I

Concord Middle School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.09	2.87	-0.48	.632
2017	12.28	2.76		
Teaching				
2015	36.42	9.21	1.71	.088
2017	34.75	5.71		
Morale				
2015	31.32	5.23	-1.03	.305
2017	31.94	3.88		
Relationships				
2015	12.21	3.07	-3.26	.001
2017	13.60	2.56		
Support				
2015	12.87	2.56	5.34	.000
2017	11.23	2.04		
Safety				
2015	12.70	2.42	0.50	.615
2017	12.50	3.03		
Emotional				
2015	40.83	6.81	-1.89	.060
2017	42.69	23.52		
Total				
2015	158.44	23.52	-0.20	.840
2017	159.00	18.09		

Appendix J

Kannapolis Middle School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.17	2.60	-0.90	.370
2017	12.51	2.08		
Teaching				
2015	36.58	7.63	0.33	.742
2017	36.24	5.26		
Morale				
2015	31.83	4.19	-0.84	.404
2017	32.38	3.94		
Relationships				
2015	12.66	3.07	-2.24	.026
2017	13.69	2.68		
Support				
2015	13.08	2.38	4.14	.000
2017	11.56	2.20		
Safety				
2015	11.82	2.46	-4.88	.000
2017	13.68	2.30		
Emotional				
2015	41.65	7.01	-2.55	.012
2017	44.35	6.25		
Total				
2015	159.79	18.98	-1.57	.118
2017	164.41	17.65		

Appendix K

AL Brown High School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.45	2.74	-1.06	.288
2017	12.74	2.43		
Teaching				
2015	34.06	7.94	-2.41	.016
2017	35.63	5.20		
Morale				
2015	31.25	4.53	-2.52	.012
2017	32.43	4.22		
Relationships				
2015	12.33	2.73	-0.90	.367
2017	12.62	2.97		
Support				
2015	12.18	2.97	3.86	.000
2017	11.19	2.09		
Safety				
2015	11.48	2.25	-6.49	.000
2017	13.20	2.51		
Emotional				
2015	39.12	6.85	-8.16	.000
2017	44.61	5.97		
Total				
2015	152.88	21.24	-4.60	.000
2017	162.42	18.36		

Appendix L

Concord High School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	11.94	2.59	0.04	.970
2017	11.93	2.70		
Teaching				
2015	33.88	6.89	0.30	.758
2017	33.53	4.11		
Morale				
2015	31.77	4.35	1.14	.256
2017	30.95	2.54		
Relationships				
2015	11.33	2.40	-2.99	.003
2017	12.60	2.28		
Support				
2015	11.49	2.84	2.96	.003
2017	10.08	1.85		
Safety				
2015	12.02	2.36	-0.13	.896
2017	12.08	2.00		
Emotional				
2015	40.32	6.56	-1.68	.094
2017	42.20	4.84		
Total				
2015	152.75	19.13	-0.19	.853
2017	153.35	13.36		

Appendix M

NW Cabarrus Middle School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.69	2.58	2.42	.016
2017	12.00	3.06		
Teaching				
2015	37.88	7.63	5.85	.000
2017	33.90	6.54		
Morale				
2015	32.29	3.91	1.80	.073
2017	31.53	4.49		
Relationships				
2015	11.71	2.81	-1.95	.052
2017	12.34	3.52		
Support				
2015	13.88	1.73	10.72	.000
2017	11.64	2.32		
Safety				
2015	12.21	2.37	-0.73	.466
2017	12.41	3.02		
Emotional				
2015	42.62	6.37	2.27	.024
2017	41.09	7.13		
Total				
2015	163.28	17.51	4.32	.000
2017	154.91	20.87		

Appendix N

Central Cabarrus High School Student Climate Data

Dimension	Mean	S.D.	t	Sig.
Physical				
2015	12.81	2.09	4.40	.000
2017	10.70	2.72		
Teaching				
2015	37.57	8.10	2.05	.044
2017	34.85	4.35		
Morale				
2015	32.76	3.84	1.15	.253
2017	31.91	3.46		
Relationships				
2015	11.33	2.73	-2.37	.020
2017	12.67	2.93		
Support				
2015	11.81	2.50	3.04	.003
2017	10.35	2.28		
Safety				
2015	12.26	2.22	-2.06	.042
2017	13.17	2.21		
Emotional				
2015	43.28	6.74	-0.76	.449
2017	44.20	5.04		
Total				
2015	161.83	19.72	1.14	.258
2017	157.85	14.39		